Holden

# CAMIRA

# OWNER'S HANDBOOK

JE SERIES

Owner's Name .....

Address .....

Town .....

State .....Postcode .....

Model Name .....

Reg. No. ..... Eng. No. .....

Vehicle Identification No. (V.I.N.) .....

Date of Purchase ..... Odometer Reading .....

# Vehicle Identification Certificate

Selling Dealer's Stamp & Signature .....

AIR CONDITIONING

Brand ..... Serial No. .....

Date Fitted ..... Dealer Code .....

Fitted by .....

TOW BAR

Brand ..... Serial No. .....

Date Fitted ..... Dealer Code .....

Fitted by .....

NOTE: Only accessories marketed or manufactured by Holden's are covered by Holden's 12 month/20,000 km warranty.

**CHANGE OF ADDRESS/OWNERSHIP**

Holden's Motor Company requests that owners who change their address (or name) or subsequent owners who purchase this vehicle, complete and return by mail one of the forms on pages 10-34 or 10-36.

This notification is important even after the expiration of the original vehicle warranty in order that Holden's Motors Company will be able to contact you should the need arise.

Part No. 92028709 Feb. 1987 (PRINT 1)

We thank you for choosing Holden and want to assure you of our continuing interest in your motoring pleasure and satisfaction.

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— familiarise yourself with the conditions

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— Unleaded Petrol

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This handbook applies to all JE Series models and therefore you may find reference to some equipment not installed in your vehicle.

All information, illustrations and specifications in this handbook are based on the latest production information available at the time of printing. Holden's Motor Company reserves the right to make changes at any time without notice and without incurring any obligation.

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The first page of this chapter illustrates the instrument panel and identifies the gauges, warning lights and controls.

Chapter 2 .....**BEFORE DRIVING** ..... page 2-0
This chapter covers the other features of your car, not appearing on the instrument panel. Features covered include locks, seat belts, seat adjustment, horn, parking brake, mirrors, windows, antenna and the interior light.

Chapter 3 .....**STARTING AND DRIVING** ..... page 3-0
Pease read chapters 1 and 2 to familiarise yourself with your car before proceeding to this chapter. This explains the steering lock, how to start your car and when to change manual or automatic gears. There are also some precautions and fuel consumption notes.

Chapter 4 .....**ACCIDENTS & EMERGENCIES** ..... page 4-0
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Chapter 5 .....**WARRANTY** ..... page 5-0
This sets out the terms of your warranty, explains what to do if you need customer assistance and lists the GM-H Dealers all over Australia.

Chapter 6 .....**WEEKLY CHECKS**..... page 6-0
As well as taking your car in for a service, there are a few simple checks that the owner must make. These are clearly shown and illustrated. They include checking the oil, water and automatic transaxle fluid levels. It also shows how to top up the washer fluid, check your tyres and replace light bulbs.

Chapter 7 .....**TOWING**..... page 7-0
This has general guidelines regarding additional equipment to be used when towing a caravan or trailer — as well as loading capacities and safe towing trips.

Chapter 8 .....**CLEANING**..... page 8-0
Listed are the cleaning agents (and their applications) that you should use to look after your car.

Chapter 9 .....**SPECIFICATIONS AND EMISSIONS**..... page 9-0
This lists specifications, capacities and general replacement parts, including oil, bulbs, tyres, fuses, etc. Also included is information relating to the emission control features fitted to your car.

Chapter 10 .....**SERVICE/MAINTENANCE SCHEDULE**..... page 10-0
This shows when your car requires servicing and what is done at each service. Also included are the coupons that are used when you take your car to a GM-H Dealer to be serviced.

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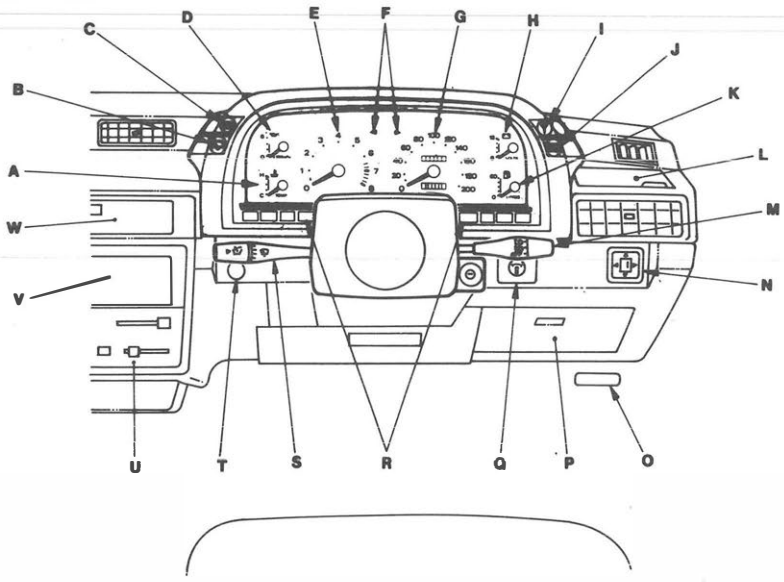


* denotes 'where fitted'


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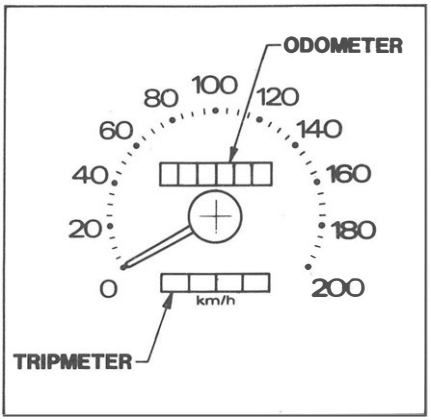
## SPEEDOMETER

The speedometer indicates vehicle speed in kilometres per hour (kph)

The odometer records the total distance travelled (in kilometers) since the car was built

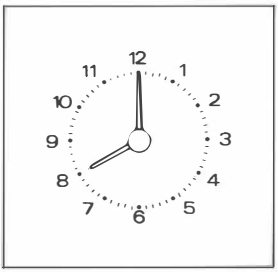
The tripmeter is used to record the distance travelled on a particular trip — up to 999.9 kilometres. Pushing the knob under the tripmeter will reset the reading to 000.0




## CLOCK (SL & SL/X)

This clock is electrically energized and operates continuously while the battery is connected.

The time setting is adjusted by pulling out and turning the knob near the 5 o'clock position.




## CLOCK (SL/E)

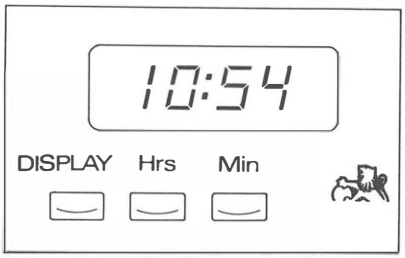
The clock is electrically energized and time is displayed when the ignition is turned on OR while the DISPLAY button is depressed.

**'HRS'**

The clock will advance one hour each time this button is pushed.

**'MIN'**

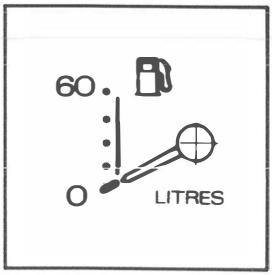
The clock will advance one minute each time the button is pushed.




The clock can be accurately set, as the next minute will not display until 60 seconds after releasing the MIN button.

— Trip computer clock, refer page 1-14

## FUEL GAUGE

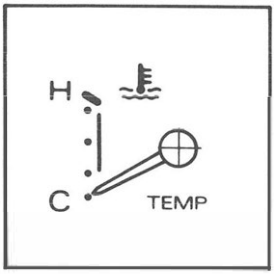



Fuel tank contents are indicated when the ignition key is turned to 'ON'.

The gauge markings are at 60 litres (full), 45 litres, 30 litres, 15 litres and 0 (empty).

Refer to instructions on rear cover when refuelling.

## COOLANT TEMPERATURE GAUGE

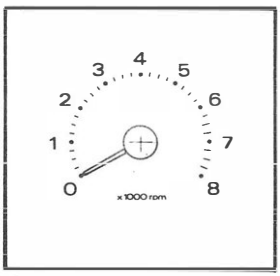



Engine coolant temperature is indicated when the ignition key is turned to 'ON'.

Under most driving conditions, the needle will remain within the operating band in the centre of the gauge.

Stop/start driving in heavy traffic, driving at high speed in warm weather, hill climbing or towing a trailer may cause the needle to move toward the 'H'. This is not dangerous. However, if the needle should move all the way to 'H' and remain there for more than 30 seconds, this signals an engine overheat condition and you should stop the car as soon as it is safe to do so. Refer page 4-7 for further instructions.

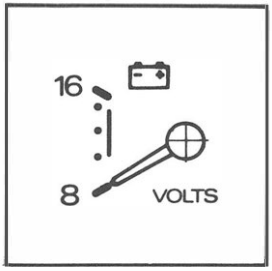
## TACHOMETER (SL/E)




The tachometer records engine speed in revolutions per minute (r.p.m.) from 0 to 8,000.

Continued or sustained operation in the RED zone could cause serious engine damage.

## VOLTMETER (SL/E)

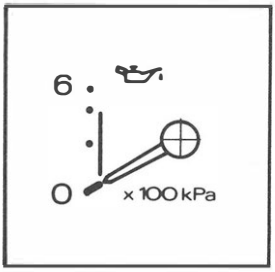



The voltmeter indicates charging system voltage. The needle should normally be between 12 and 15 Volts — below 12 volts indicates under charging and above 15 volts indicates over charging.

If the needle indicates under charging (and the generator belt drive is intact) or over charging you should see your GM-H Dealer.

Note: If the voltage is too low the generator warning symbol will be displayed.

## OIL PRESSURE GAUGE (SL/E)




This gauge indicates engine oil pressure. Should the gauge fail to indicate a reading when the engine is running at or above idle speed, the car should be stopped as soon as it is safe to do so and you should see your GM-H Dealer.

## DIMMING INSTRUMENT BRIGHTNESS

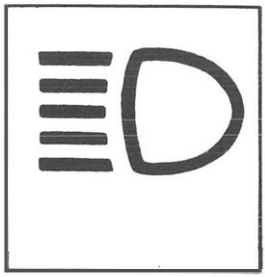
The brightness of the instruments is adjusted by turning the knob on the right side of the ignition switch. Turn clockwise for brightening and anti-clockwise for dimming.

## PARK BRAKE INDICATOR

When the parking brake is applied with the ignition switch in the 'ON' position, the red sign will glow until the parking brake is released.

## HIGH BEAM INDICATOR

When the headlight high beams are in use, the blue symbol will glow.

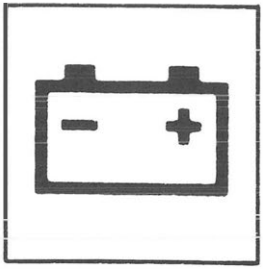


## BRAKE FAILURE WARNING

The symbol glows red when the ignition switch is turned to 'ON' — until the engine is started. If the light should glow when the engine is running it indicates that there may be something wrong with the braking system. You should immediately stop on the side of the road as carefully as possible. Do not proceed until satisfied that cautious progress is possible or that the cause of the problem has been fixed.

## GENERATOR WARNING

This red symbol will glow when the ignition switch is turned to 'ON' — until the engine is started. If the light should glow when the engine is running it indicates that the generator is not charging. If the generator drive belt is intact there is a problem in the charging system and you should see your GM-H Dealer.



## CHECK ENGINE WARNING

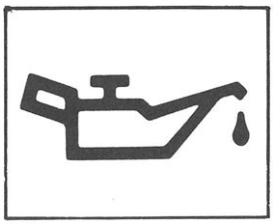
**(Australian Cars only)**
Your Camira is fitted with an Electronic Engine Management System. The check engine light indicates when system service is required.

When the engine is not running but the ignition switch is turned to 'ON' the check engine light will flash once and then remain on — until the engine is started.

If the light comes on whilst driving (either intermittently or continuously) then service to the Engine Management system is required. Although the car may still be driveable and does not require towing, see your GM-H Dealer as soon as possible for an inspection of the System, as continued driving could affect fuel consumption and engine performance.

## OIL PRESSURE WARNING

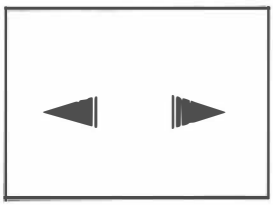
This red symbol will glow when the ignition switch is turned to 'ON' — until the engine is started. If the light should glow when the engine is running at or above idle speed, stop as soon as it is safe to do so and do not proceed until the cause of low oil pressure is corrected.



## TURN SIGNAL INDICATORS

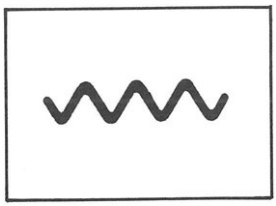
The appropriate green arrow will continuously flash when the lever, attached to the right side of the steering column is moved up or down, refer page 1-7.

NOTE: Both arrow signals will flash when the Hazard Flasher Button is depressed. This is located on top of the steering column, refer page 4-3.



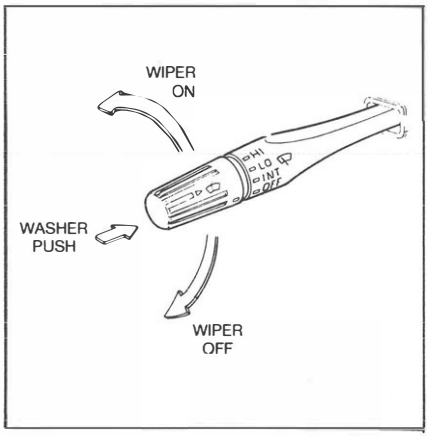
## REAR DEMISTER INDICATOR

When the ignition switch is turned to 'ON' this orange symbol will glow if the demister is switched on, refer page 1-6.



Note that whereas both the rear (wagons only) and front wipers and washers operate when the ignition is in either the 'ON' or 'ACC' position, the demister only operates when the ignition is in the 'ON' position.

## FRONT WIPERS & WASHERS

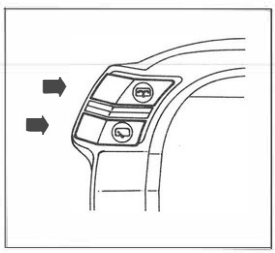



The stalk on the left side of the steering column controls the windscreen wipers and washers.

Never operate the wipers on dry glass, as this will damage the rubber. To obtain a spray of fluid, push in and hold the button on the end of the stalk as long as required. This will automatically turn on the wipers for a short time, if not already operating.

Rotate the knob on the end of the stalk anti-clockwise to turn on the wipers. Intermittent (where fitted) is used when driving in conditions such as drizzle or mist, LO switches the wipers to low speed and HI to high speed.

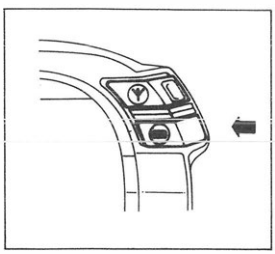
## REAR WIPER & WASHER (Wagon Only)



The two switches, illustrated, control the rear wiper and washer on wagon models.

Never operate the wiper on dry glass, as this will damage the rubber. To obtain a spray of fluid, depress the top switch as long as required. Depress the lower switch to turn on the wiper, depress the switch again to turn the wiper off.

## REAR WINDOW DEMISTER



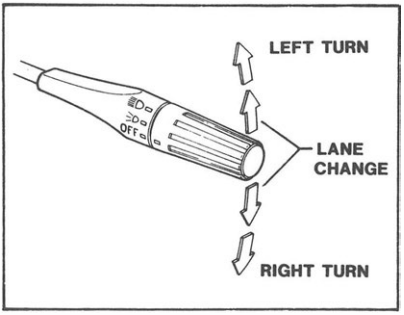
Depress the switch to turn on the demister. A light on the instrument panel will glow when the demister is in use. Repress the switch again to turn the demister off.

Note: To avoid unnecessary electrical consumption the demister should only stay on until the window is clear.

Refer page 6-8 for refilling washer fluids.

The combination lever, on the right side of the steering column, controls turn signals, headlights and high/low beam.

## TURN SIGNAL & LANE CHANGING

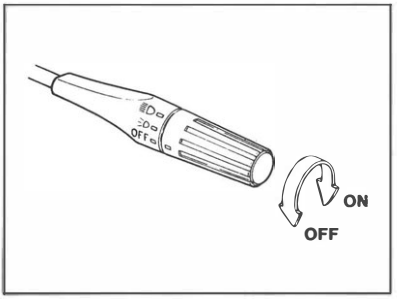



Push the lever up to signal a left turn, and down to signal a right turn. The lever will return to the neutral position when the turn is completed.

In some turns (such as changing lanes) the steering wheel is not turned far enough to cancel the turn signal. To indicate a lane change, move the lever part way and hold. The lever will return to the neutral position when you release it.

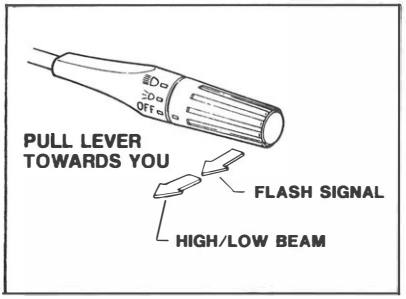
A green arrow on the instrument panel will flash when the lights are in operation. This is accompanied by a clicking sound.

## HEADLIGHTS




The light switch, on the end of lever, rotates to 3 positions. Line the non-rotating section with the required light marker on the rotating section.
The lower marker is the OFF position, the middle is for the parking lights and the top marker is for the headlights.

## HIGH/LOW BEAM



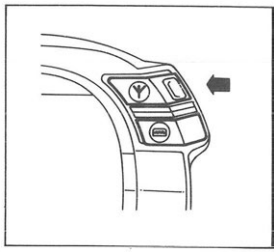

With the headlights on, pull the lever towards you (through the flash position) until you feel a click, then release. The headlights will change from low to high beam or from high to low beam. When the high beams are in use, a blue light on the instrument panel will glow.

It is also possible to flash the high beam for signalling purposes (even if the headlights are switched off) by moving the lever towards you. A light resistance will be felt at the flash position. The lights will remain in high-beam as long as the lever is held.

## RADIO/CASSETTE

Refer to the operating instruction supplement in your glovebox, for all information relating to the operation of your radio/cassette.

## ANTENNA ADJUSTMENT — ELECTRIC (where fitted)



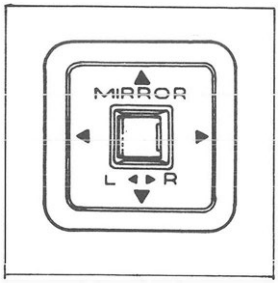
The electric antenna will not operate unless the radio unit is switched on. The antenna can then be extended (by pressing the left side of the switch) or retracted (by pressing the right side of the switch). When the radio is turned off or the ignition switch is turned to OFF or LOCK, the electric antenna will automatically retract.

Manual antenna adjustment, refer page 2-11.

## CIGARETTE LIGHTER

The cigarette lighter is operational with the ignition switch is in either the ON or ACC positions. To operate, simply press in the lighter knob. When the element is hot the lighter will automatically pop back to its original position, ready for use.

## OUTSIDE MIRROR — ELECTRIC (where fitted)



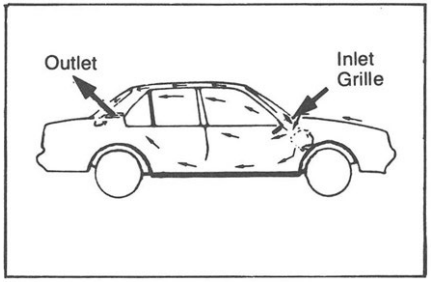

Left/right mirror selection is made by moving the toggle switch, in the middle of the square, to L or R.

Depress the rim (surrounding the toggle switch) in the direction indicated by the arrows, to adjust the mirror.

The ignition switch must be in ACC or ON when adjusting the mirrors.

Manual mirror adjustment, refer page 2-11.

Your car features a flow-through ventilation system which will operate with all the windows closed.



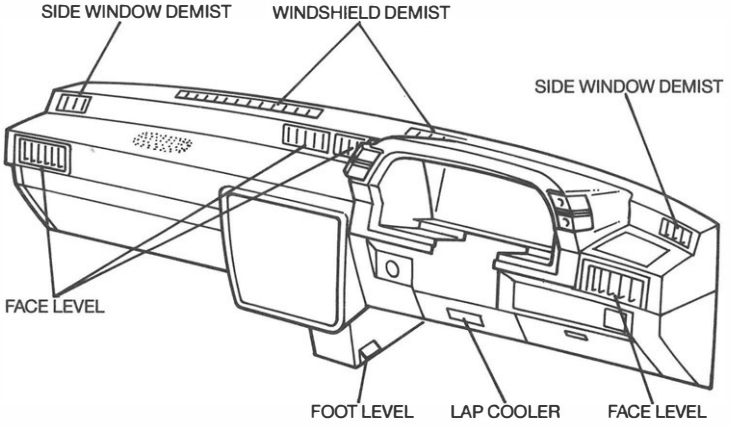

Outside air enters the car through the grille in front of the windscreen. It then passes through the heater or air conditioning system (if fitted) and enters the passenger compartment via the various air outlets.

After passing through the interior of the car, stale air is then exhausted through two extractor vents. In sedans these are on the rear body pillar and in wagons they are in the body pillar, just behind the rear doors.

**NOTE: The ventilation system will not work if the air inlet grille is allowed to become covered or clogged up with leaves, snow, etc. Keep it clean and uncluttered.**

## AIR OUTLETS

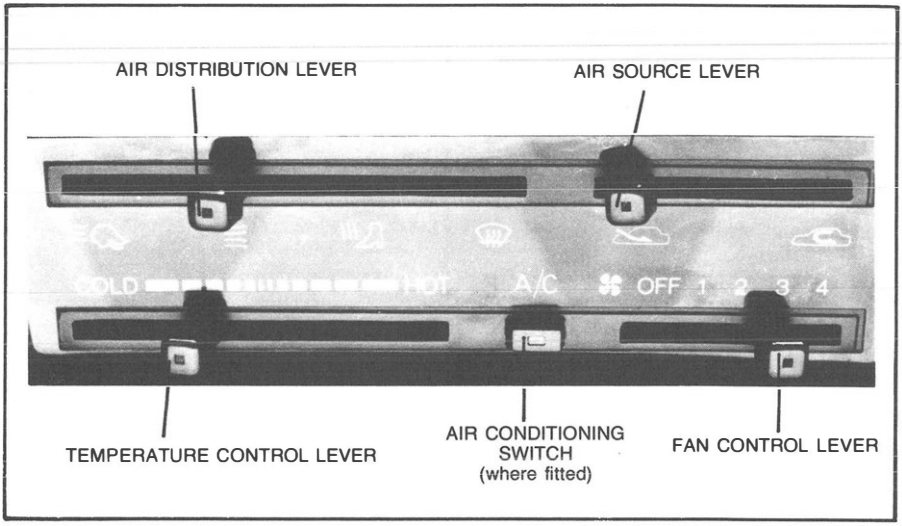
The various air outlets into the passenger compartment are shown in the illustration. The selection of particular outlets and air temperature and/or air conditioning is controlled by the ventilation and heater panel, described in the following pages.




Use the lever in the centre of the face level outlets to adjust the angle of air flow. They may be moved up/down and left/right.

The lap cooler outlet can be adjusted up/down only.

The demister and foot outlets are "fixed" as these direct air onto the feet or to the windscreen and windows in the best possible way.




## • Air Distribution Lever

FACE: Air is directed through the face level and lap outlets.

BI-LEVEL: Air is directed through the face, lap and floor outlets. When using BI-LEVEL with the temperature lever is an intermediate position and the Air Source Lever in the outside air position, warm air will be directed to the feet and the cooler air to the face.

FLOOR: Air is directed to the floor, windshield demister and side window demister outlets.

SCREEN: Air is directed to the windshield demister and side window demister outlets.

## • Air Source Lever

This lever has two positions:

OUTSIDE — Use this position for a continuous supply of air from outside the car.

RECIRCULATE — In this position the air inside the car is recirculated continuously whilst the interior fan is operating. This position is recommended for:

- driving in dusty conditions (with all windows wound up)
- preventing fumes and odours entering
- maximum cooling with the air conditioning system, particularly when the engine is idling.

If this position is used for extended periods of time you should allow outside air to enter the car occasionally by moving the level to the outside air position.

## • Temperature Control Lever

This lever is used to control the temperature of the air being discharged from the various air outlets.

## • Fan Control Lever

The fan control lever has five positions: OFF, 1, 2, 3 & 4, for controlling fan speed, thereby controlling the rate at which air flows from the various outlets.

## • Air Conditioning Switch (where fitted)

To turn on the air conditioner push the A/C button and move the fan control lever to position 1, 2, 3, or 4.

NOTE: The air conditioner will not operate with the fan control lever in 'OFF' position.

A small light in the A/C switch will glow to indicate the air conditioner is turned ON. To turn the air conditioner off, repress the switch.

- If the car interior is extremely hot, first drive for two or three minutes with all windows open to expel heated interior air.

- Keep windows closed while the air conditioner is in operation.

- If your car is stopped for long periods in hot weather with the engine running and air conditioner operating, move the air source level to 'Recirculation' for maximum cooling. Also, if fitted with an automatic transaxle, select NEUTRAL or PARK. This will increase engine speed which in turn aids engine cooling and air conditioner performance.

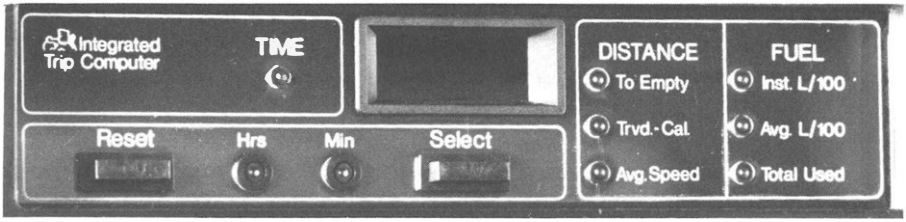
- Under normal conditions it is recommended that the recirculated air setting be avoided if occupants are smoking as residues from the tobacco smoke adhere to the air ducts and will produce stale smelling air.

- The following procedure should be carried out regularly during those periods of the year (e.g. winter) when the air conditioner may not normally be used.

  Once every two weeks, with the engine running, switch the air conditioner on and run the unit for at least 5-10 minutes.

  This will recirculate the oil within the system and so prevent seals from drying out — which could lead to air conditioner failure.

- CONDENSOR CLEANLINESS: Ensure that the condenser and radiator passages are kept clear of dead insects etc. Cleaning with an air hose is preferable, however a soft bristle brush may be used, taking care not to damage the cooling fins.




The trip computer consists of:

- A four digit display panel.
- Control panel with four buttons:
  (1) Reset (Resets computer when pressed with select button)
  (2) Hrs (Adjusts hours on clock)
  (3) Min (Adjusts minutes on clock)
  (4) Select (Changes functions displayed)
- Time Function
- Function Module — with six DISTANCE/FUEL functions.

## To Operate the Trip Computer

— When ignition is turned off the **time** may be displayed by holding the "Select" button down.

— When ignition is turned on, the **time** will be displayed, irrespective of what function was being used when the ignition was turned off.

— Depressing the "Select" button will result in displaying the first function of the Function Module. Each time the "Select" button is pressed the computer goes to the next function. The functions are called up in the following sequence.

- **Distance to empty** (km)
- **Distance travelled since reset** (km)
- **Average speed since reset** (km/hr)
- **Instantaneous fuel usage** (litres/100 km)
- **Average fuel usage since reset** (litres/100 km)
- **Total fuel used since reset** (litres)
- **Time.**

The function being displayed on the Display Panel is indicated by a red light opposite that function on the Function Module.

**NOTE:** As the trip computer draws current even with the ignition off, it is a good practice to disconnect the battery if the vehicle will NOT be driven for extended periods.

When the battery is reconnected the computer will need to be reset to ensure correct operation.

## Resetting

To reset the computer, firstly use "Select" button until the **time** function is displayed. Press and hold the "Reset" button. This will display **elapsed time** (ignition "on" time since last reset). Momentarily depress the "Select" button and the **elapsed time** will reset to zero. This will reset all functions to zero with the exception of **time** and **distance to empty.**

The computer can be reset at any time, however, the following is considered normal practice:

— at each fuel tank refill. The computer will then give you results that are averaged out over each tank full of fuel.

— at beginning of a trip. This might involve many tank refills and results will then be computed over the total journey.

## Clock

The clock is a 12 hour clock with a flashing decimal point.

When the ignition is turned off the **time** function may be displayed by holding the "Select" button down.

When the battery is first connected the clock will show 12.00 and if 12.00 is not the correct time, depress the "min" button for minute adjustments and the "hrs" button for hours adjustment (use a pencil or like object). It is suggested that minutes be adjusted prior to hours because as the minutes pass 60 the hours number automatically increases by one.

The clock can be accurately set as the next minute will not display until 60 seconds after releasing the adjustment button.

## Distance to Empty

This function is updated every 2 minutes. It is adjusted in 10 km units when the reading is over 100 km; 5 km units when the reading is between 100 km and 50 km; 1 km units when the reading is under 50 km. No computer can predict the future so the **Distance To Empty** function can only be an estimate on previously obtained information. For this reason, as conditions become more suited to economical driving the **Distance To Empty** can actually increase, for example, from city to highway driving.

The **Distance To Empty** is calculated from both the fuel usage and the amount of fuel remaining in the tank. Because of movement of fuel in the tank while the vehicle is mobile, the readings are heavily damped and averaged over a long time — approx 20 mins.

Therefore, if less than 8 lts approx of fuel is added, this will register as fuel surge and the **Distance To Empty** will not immediately increase. When adding more than approx 8 lts the computer will indicate a higher **Distance To Empty** at the next two minute update.

After initial connection **Distance To Empty** will start at 500, the computer will then perform an initial update from a short average, prior to commencing the long averaging process.

## Distance travelled

This function shows the distance travelled in kilometres since the computer was reset, it shows two decimal points up to 100 km, one decimal point up to 1,000 km and whole numbers thereafter.

## Average speed

The **average speed** reading measures average speed since the computer was reset and only calculates this average speed whilst the ignition is on.

To enable the computer to collect enough data to calculate a sensible speed the display will show zero for two minutes after reset.

Reading is updated at two minute intervals.

## Instantaneous consumption

The **instantaneous fuel consumption** function reads to one decimal point below 10 L/ 100 km and in whole numbers above 10 L/100 km and updates at half second intervals.

When the vehicle is stationary the display shows zero, however, when slowing down to a stop due to fuel being used and a small distance being travelled, some large numbers may be displayed. Also, when the function is first called up some large numbers may appear due to the short distance travelled and the high fuel consumption during acceleration.

## Average consumption

The **average fuel consumption** calculates fuel usage since the last reset and reads in litres/ 100 km. It updates at approximately two minute intervals.

## Fuel used

Total **fuel used** since reset is measured in litres to a maximum of 9999 litres.

## Alternative Functions

In addition to the functions already described, another set of readings are available by holding down the 'Reset' button when different basic functions are displayed.

| | Alternative Functions |
|---|---|
| **Time** | Elapsed Time (ignition 'on' time since last reset) |
| **Distance to Empty** | Litres Remaining in Fuel Tank |
| **Distance Travelled** | Distance Calibration number |
| **Average Speed** | Instantaneous Speed (km/hour) |
| **Inst. Fuel** | — |
| **Average Fuel** | Fuel Tank Calibration number |
| **Total Fuel Used** | Fuel Flow Calibration number |

### CALIBRATION NUMBERS

The trip computer uses in its calculations three separate calibration numbers — fuel flow, fuel tank and distance. These figures are pre-set for the standard car, and do not have to be adjusted. However each car does vary, due to tyre size, tolerances etc., and therefore the facility is provided to adjust these figures to precise accuracy. The procedures for each calibration number is as follows.

NOTE: Calibration Numbers are not disturbed by "reset" but are lost if battery is disconnected.

### DISTANCE CALIBRATION NUMBER

- Press the 'Select' button until the **Distance Travelled** function is displayed.
- Line the vehicle against a known marker, e.g., line the front wheel of the car with a highway kilometre (shield) post.
- Press the 'Hrs' button — the display will go to zero.
- Drive off and display will increase. Stop the car exactly 10 km from the starting point, e.g., front wheel in line with highway kilometre (shield) post, 10 km from the original post.
- Write the number displayed here:

| | Distance Calibration Number |
|---|---|

- Press the 'Min' button. This will complete the distance calibration, enter the displayed calibration number into the computer memory and return the display to the **Distance travelled** function.

NOTE: — This calibration does not reset other functions back to zero.
— The Calibration Number will return to 625 if the new figure is outside the limits of 512 and 1023.

The Calibration Number can be shown at any time by holding the 'Reset' button when **Distance Travelled** function is displayed.

If the battery is disconnected the Calibration Number will return to 625 when reconnected. If the precise Calibration Number was recorded:

— Press the 'Select' button until the **Distance Travelled** function is displayed.

— Hold the 'Reset' button to show the preset Calibration Number, and whilst held, press the 'Hrs' or 'Mins' buttons to increase or decrease, respectively.

— When the correct number is obtained, release the 'Reset' button. This will enter the new Calibration Number into the memory and return the display to the **Distance Travelled** function.

NOTE: The distance calibration can be manually adjusted outside the above limits with the 'Hrs' and 'Mins' buttons. If the distance calibration number is not 625, the distance travelled on the instrument trip odometer will not agree with the **Distance Travelled** on the trip computer. The trip computer is now more accurate.

### FUEL FLOW CALIBRATION NUMBER

The preset figure is 625. If you wish to adjust this, first reset the trip computer. Then for five consecutive fuel fills record the total litres added, as appears on the Service Station Fuel Pump. Note also the figure on the **Total Fuel Used** function, then calculate on a desk calculator.

$$\text{cal. (new)} = \text{cal. (old)} \times \frac{\textbf{fuel used} \text{ (trip computer)}}{\text{actual (service station pump)}}$$

— Write your calculated number here:

| | Fuel Flow Calibration Number |
|---|---|

To adjust the Fuel Flow Calibration Number:

— Press the 'Select' button until the **Total Fuel Used** function is displayed.

— Hold the 'Reset' button to show the Calibration Number, and whilst held press the 'Hrs' or 'Mins' buttons to increase or decrease, respectively, until cal. (new) is obtained.

— Release the 'Reset' button. This will enter the new Calibration Number into the memory and return the display to the **Total Fuel Used** function.

### FUEL TANK CALIBRATION NUMBER

The preset figure is 00.0. Due to minor tolerances in the fuel system of each car this calibration number may be adjusted.

The only time that this can be checked is when your car has just run out of fuel.

— Press the 'Select' button until the **Distance To Empty** is displayed.

— Hold the 'Reset' button to display the Trip Computer's reading of litres remaining in the fuel tank.

— Whilst holding the 'Reset' button, use the 'Hrs' and 'Mins' buttons to increase or decrease respectively the fuel tank contents so that it reads zero, e.g. The vehicle runs out of fuel and the trip computer indicates 1.7 L of fuel remaining (press 'Reset' when **Distance To Empty** function displayed). Reset to zero using 'Min' button. As the tank contents is lowered to zero, so will the fuel tank calibration number be lowered from zero to minus (−1.7). Both will adjust simultaneously and update the memory. The −1.7L tank calibration number can be seen by depressing the 'Reset' button when **Fuel Average L/100 km** is displayed.

— Write the calibration number here:

| | Fuel Tank Calibration Number |
|---|---|

If the battery is disconnected the Calibration Number will return to 00.0 when reconnected. If the precise Calibration Number has been recorded:

— Press the 'Select' button until the **Fuel Average L/100** function is displayed.

— Hold the 'Reset' button to show the Calibration Number, and whilst held press the 'Hrs' and 'Mins' buttons to increase or decrease, respectively. Release buttons.

NOTE: The owner may wish to use this feature to deliberately program a fuel reserve into the trip computer. This can be done at any time by using the above method.

# Chapter 2
# Before Driving

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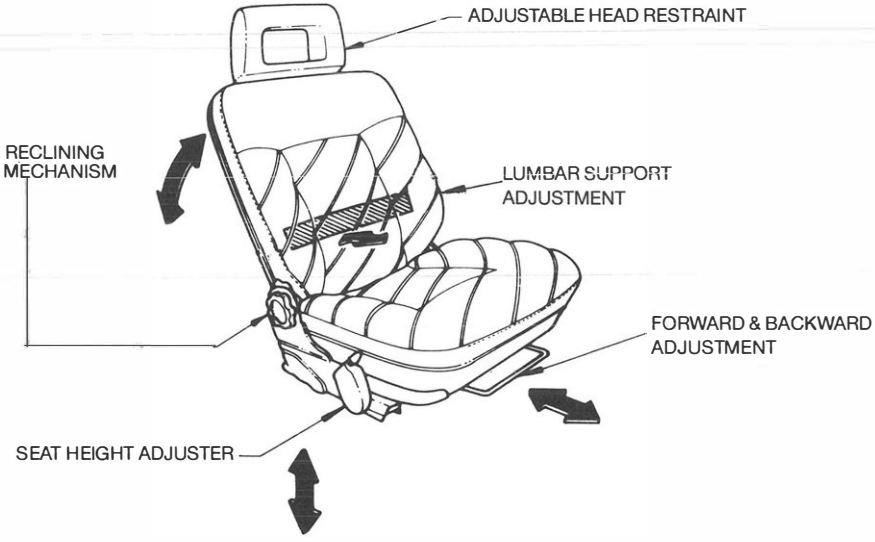
2-1 — Front Seat Adjustment
2-3 — Folding Rear Seat (Wagon)
2-4 — Seat Belts
2-5 — Child Restraints
2-7 — Keys
2-8 — Door Locks, including 'child proof' lock
2-9 — Locks — other than doors
2-10 — Windows
2-11 — Mirrors
2-11 — Antenna
2-12 — Horn
2-12 — Interior Light
2-12 — Park Brake




## Forward and Backward Setting

Lift the bar at the front of the seat upwards then slide the seat to the desired position. Release the bar. Try to move the seat back and forth to check that the catch is fully engaged. Adjustment should not be made when the car is moving. The seat could move suddenly and cause the driver to lose control of the car.

## Reclining Back Control

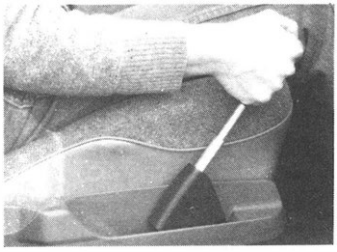
The reclining back is controlled by a large, toothed wheel on the bottom of the door side of the seat. By turning the wheel, the reclining position of the seat can be changed through a large angle. The seat back will move in the same direction as the top of the wheel.

CAUTON: To avoid reducing the effectiveness of seat belts, it is recommended that reclining seats be used in no more than a semi-reclined position when the car is moving. The fully reclined position should be used only when the car is stationary.

## Lumbar Support (where fitted)

This feature is fitted to the driver's seat only and is adjusted by moving the lever situated on the inner (passenger) side of the seat back. The lumbar support can be adjusted to suit the degree of seat firmness that you require to support your lower back region.

## Seat Height Adjustment (where fitted)



The driver's seat height is adjustable by extending the telescopic lever on the door side of the seat and then moving the lever as follows:

To lower seat — move lever towards front of car

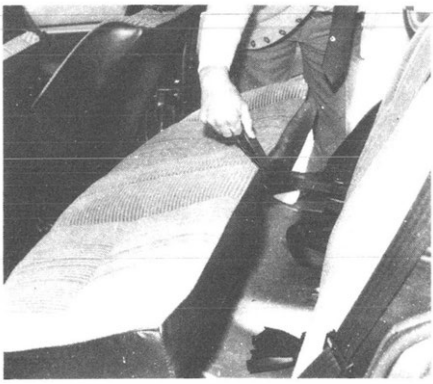
To raise seat — move lever towards rear of car

## Head Restraint

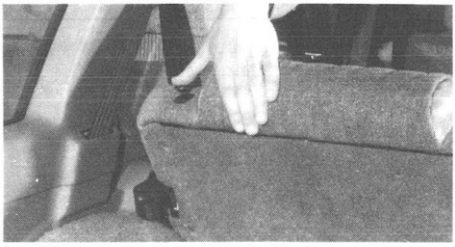
This safety feature is provided for the reduction of possible injury that may result from a whip-lash neck movement following a collision.

Adjust the restraint (by pulling up or pushing down) until the upper bar of the restraint is in line with the rear most part of your head.

**Step 1:** Pull the tag which is at the rear centre of the seat to release the catch and raise the seat to an upright position.

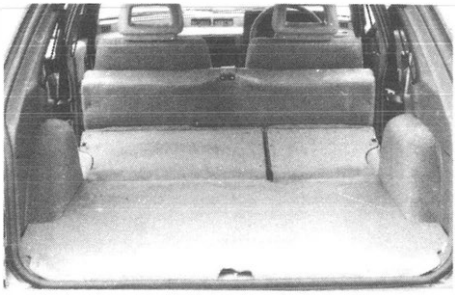


**Step 2:** Unlock the catches on the top of the left and/or right side sections of the seat back by depressing the button(s).



**Step 3:** Fold left and/or right side sections of the seat back forward.

To reconvert, reverse the above procedure. Ensure that both sections of the seat back lock securely and that seat belts are free of the seat back.



## Retractor Belts

To put on a retractor seat belt, pull the metal tongue across your body and clip it into the buckle. When the metal tongue has locked safely into place you will hear a "click". After fastening, settle the belt by running your hand under the belt starting at the hip, go across to the buckle, then up under the sash. Any extra belt length will retract automatically.

The lap section should be worn as low as possible on your hips, not on your waist. Make sure the sash and lap sections of the seat belt are free from twists and are fitted firmly.

The emergency-locking retractor belt allows you to move freely while the vehicle is travelling normally. The belt will lock immediately on fast braking, impact with a solid object or any quick movement by the wearer.

To release the belt, press the release button on the buckle and allow the belt to retract. Check that it fully retracts without twisting or turning.

**NOTE: The belt may also lock-up if the vehicle is on a steep incline. It will become free again on level ground.**

## Lap-Type Belts

To adjust: Settle yourself comfortably. Bring the tongue adjuster across your body and clip it into the buckle. When the metal tongue has locked safely into place you will hear a "click". Make sure the belt is fitting firmly across the lower hip area and not across your waist.

To shorten: Tilt the tongue adjuster and pull the belt through the belt adjuster.

To lengthen: Tilt the tongue adjuster and pull the belt from just below the finger grip bar.

## Infant and Child Restraints

CHILDREN SHOULD BE RESTRAINED AT ALL TIMES WHEN RIDING IN A MOTOR VEHICLE.

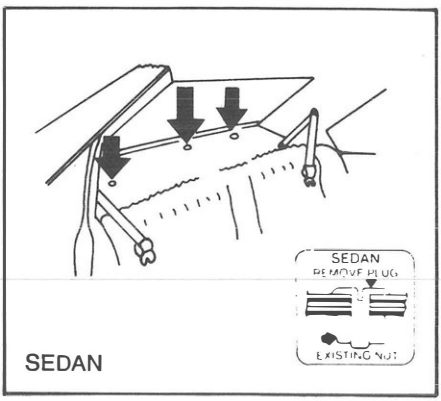
In some states it is Law that children must be belted in, whenever they are travelling in a vehicle in which seat belts are installed. CHILDREN ABLE TO SIT UP should be restrained with the regular seat belt or an approved child restraint.

Where children are restrained with the regular belt and it is desired to raise their seating position this is to be done only by means of a support which is retained by the belt. NEVER USE A LOOSE CUSHION AS THIS COULD ALLOW SERIOUS INJURY IN THE CASE OF VEHICLE COLLISION.

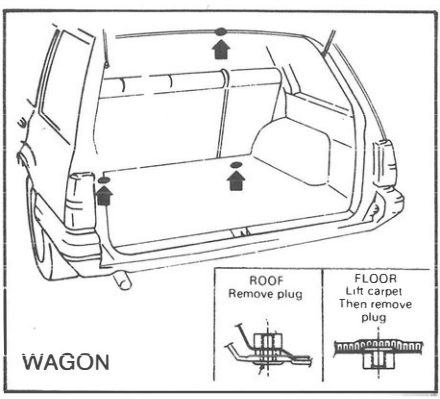
## Child Restraint Anchorages

Your car is fitted with upper anchorage points for child restraints and these are located as follows:

**Sedan**
Anchorage points are located on the rear window ledge. Remove the plugs and install child restraints with the correct anchor bolts.




**Wagon**
Anchorage points are located on the floor behind the rear seat. Remove the plugs and install child restraints with the correct anchor bolts.



**WARNING: Child restraint anchorages are designed to withstand only those loads imposed by correctly fitting child restraints. Under no circumstances are they to be used for adult seat belts or harnesses.**

Only approved child restraint harnesses should be used on anchorage points. See your GM-H Dealer for advice about the various types of approved child restraints.

INFANTS UNABLE TO SIT BY THEMSELVES should be carried in a padded bassinet or carry basket placed across the back seat.

A suitable type of bassinet restraining system should be used.

The Holden Child Seat is designed for children weighing 9 to 19 kg, up to 1 metre in height, who are able to sit up alone.

**WARNING: Seat belts are designed to bear upon the bony structure of the body, and should be worn low across the front of the pelvis, or the pelvis, chest and shoulders, as applicable; wearing the lap section of the belt across the abdominal area must be avoided.**

**Seat belts should be adjusted as firmly as possible, consistent with comfort, to provide the protection for which they have been designed. A slack belt will greatly reduce the protection afforded to the wearer.**

**Care should be taken to avoid contamination of the webbing with polishes, oils and chemicals, and particularly battery acid. Cleaning may safely be carried out using mild soap and water. The belt should be replaced if webbing becomes frayed, contaminated or damaged.**

**It is essential to replace the entire assembly after it has been worn in a severe impact even if damage to the assembly is not obvious.**

**Belts should not be worn with straps twisted.**

**Each seat belt assembly must only be used by one occupant; it is dangerous to put a belt around a child being carried on the occupant's lap.**

**No modifications or additions should be made by the user which will either prevent the seat belt adjusting devices from operating to remove slack, or prevent the seat belt assembly from being adjusted to remove slack.**

**The positioning of the tongue restrictor must never interfere with, or stop, the belt from fully retracting.**

Your Camira is fitted with a two key locking system. This provides security for personal valuables (placed in the boot or glovebox) when parking in areas where you are required to leave a car key.

## Master Key

The Master key (plastic head) operates all locks on the car. The key code number is stamped on the Plastic Key Head. Before placing the key on your key ring, record the code number so that if the key is lost, duplicates can be ordered from any GM-H Dealer by quoting the key code number.

## Service Key

The Service key (metal head) operates only the door locks and ignition switch. This key may be left with the car, if required, as it enables the car to be moved but does not operate the glovebox or boot locks.

## Manual

When Leaving The Car

- Both front door locks can be locked or unlocked with either the Master or Service key. To open doors, unlock with key then lift the door handle.
- To lock doors without using the key, push down the lock button (inside the car) then close the door while holding up the door handle.

When Remaining Inside The Car

- Push the lock button down to lock the door, pull up to unlock.

## Electric (where fitted)

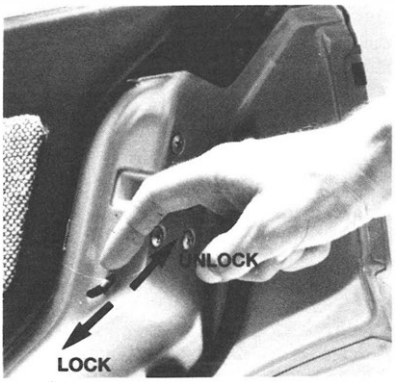
All doors will unlock and lock simultaneously when the driver's door is locked or unlocked either with the inside lock button or the key from outside.

Door locks may be operated manually in the conventional manner.

## Rear 'Child Proof' Door Locks

This added safety feature is built into both rear door locks. To operate it push the lever **down** as far as it will go and close the door. The door cannot now be opened from inside regardless of the locking position. To disengage, open the door from outside and push the lever **up** as far as it will go.

**CAUTION: For safety, you should check that the lock is operating correctly, after setting, by attempting to open the door from the inside.**



## Glove Box Lock

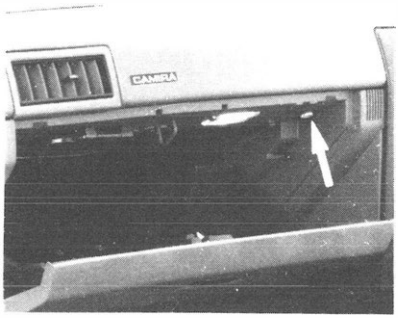
To lock, insert the master key, rotate clockwise half a turn and then withdraw.

To unlock, insert the master key and rotate anti-clockwise half a turn.

To open, squeeze the two sides of the catch together and pull towards you. To close, push lid firmly back into place.

The light inside the glove box will come on and go off with the opening and closing of the glove box.

## Remote Control Boot Release (where fitted)



In addition to the key operated lock, the boot may be provided with a button inside the glove box which, when pushed, will automatically open the boot.

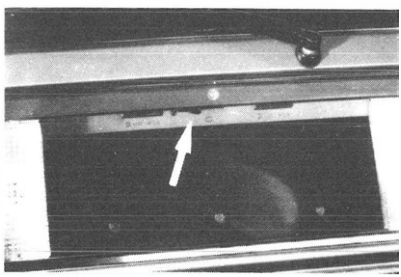
NOTE: If you leave your car in a car park with the Service Key, ensure that the glove box is locked so that access to the boot via the lock button is prevented.

## Sedan Boot Lock

To unlock and open, turn the Master key clockwise. The boot locks automatically when pushed shut.

The light inside the boot switches on and off with the opening and closing of the boot.

## Wagon Tailgate Lock



To unlock the tailgate, insert the master key and turn. Lift the lever (as shown) to release the catch and then raise the tailgate. The gas struts will assist in raising the tailgate and supporting it in the fully open position.

To close, pull down and firmly close. The tailgate should then be relocked with the key.

The light in the rear loading area will switch on and off with the opening and closing of the tailgate.

CAUTION: To prevent entry of dangerous exhaust fumes into the car, the tailgate or boot should be closed when the engine is running. However, if it is necessary to leave open, then all windows must be closed, and the air source lever of the heater panel moved to fresh and the fan to speed '4'.

Refer inside rear cover for information on FUEL cap lock and remote release.

## Manual

The door windows are lowered or raised by turning the winders which are fitted to each door.

## Electric (where fitted)

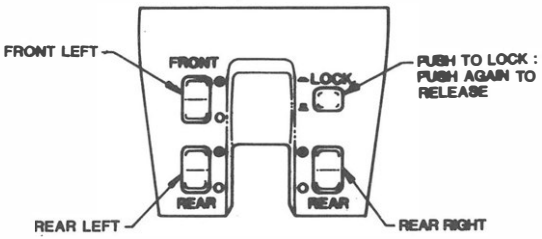
* operational when the ignition key is in either the ON or ACC position.

The master control, fitted in the centre console has 3 'rocker' switches (which control the passenger windows) and a push button (LOCK) that immobilises the passenger's windows.

**'ROCKER' SWITCHES**

To raise — push forward section of respective switch.

To lower — push rearward section of respective switch.




Each rear door window can also be operated by a switch on their arm rest, provided the LOCK button on the console is not depressed.

The driver's window is operated by the 'rocker' switch on the arm rest. To close the window, press the front part of the switch. To open the window, press the rear of switch, either lightly (and hold until the window is at the desired height) or, push firmly and remove your finger; the window will continue to open automatically until it is completely down.

A time delay feature enables all the windows to be operated for approximately 30 seconds after the ignition key is turned away from ACC or ON. If the driver's window is operated before the 30 seconds has run out, the timer will reset and allow another 30 seconds delay. Resetting is continuous.

# REARVIEW MIRRORS

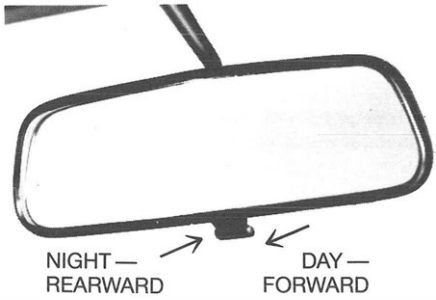
Adjust the outside and inside mirrors before driving. For safe driving, rear vision must be unimpaired. Observe State regulations regarding rear view mirrors for vehicles towing a trailer.

## Inside Mirror

This is shatter-resistant, and mounted in such a way that it can be knocked out in case of accident to reduce the risk of injury.

The control lever on the lower edge of the mirror enables an anti-glare reflector to be used during night driving. This reduces headlamp glare from following vehicles.

During normal daylight operation, the lever should be set forward away from driver. To reduce glare at night, move the lever backwards towards driver.

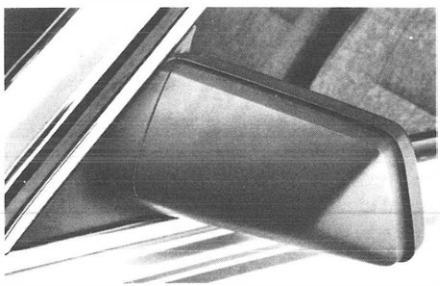



## Outside Door Mirror

This mirror is hinged to allow it to be knocked without causing injury to pedestrians.

The remote control type mirrors (where fitted) may be adjusted by manipulating the lever located on the inside of the door.

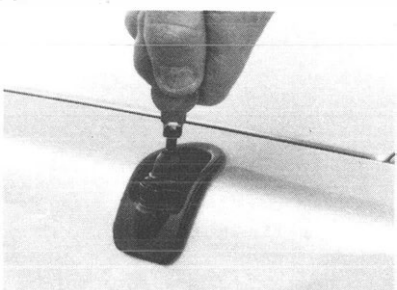
Refer to page 1-8 for operation of electric control mirrors (if fitted).



# ANTENNA

## Manual

To extend this antenna from its fully closed position you must use the special key provided. Insert the key into the slots as shown and then use the key to withdraw the top section of the antenna. All sections can then be fully extended for maximum distance reception.



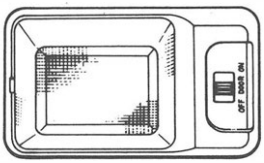
## Electric (where fitted)

Refer to page 1-8 for operation of electric control antennas.

## HORN

The horn is activated when the pad in the centre of the steering wheel is pressed.

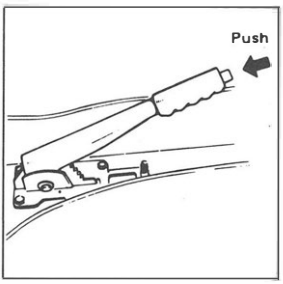
## INTERIOR LIGHT




The interior light switch has three positions. 'OFF', 'ON' and 'DOOR'. When the switch is moved to the 'ON' position the light will come on. When moved to the 'DOOR' position the light will come on and go off with the opening and closing of the doors. In the 'OFF' position the light stays off all the time.

## PARK BRAKE

The park brake lever is mounted on the floor between the front seats.




- To Apply. Pull the lever straight up, without pressing the release button.
- When the ignition switch is turned to ON, a light on the instrument panel will indicate that the parking brake is applied, refer page 1-4.
- To Release. Push in the release button on the end of the lever, and whilst depressed, pull the lever slightly upwards before lowering the lever all the way down.
- NEVER drive the car with the park brake applied.

# Chapter 3
# Starting & Driving

Page

3-1 — Safety Check List
3-2 — Ignition Lock
3-3 — Starting the Engine
3-4 — Manual Transaxle
3-5 — Automatic Transaxle
3-6 — Running-In
3-6 — Reducing Fuel Consumption
3-7 — Driving Precautions

## Exhaust Gas Warning

**(Carbon Monoxide Poisoning)**

Exhaust gases contain carbon monoxide, a dangerous gas, which can cause unconsciousness and even death to both humans and animals.

You could inhale the gases if the exhaust system on your vehicle is faulty.

To protect against exhaust gas entry into the interior of the vehicle we recommend that the exhaust system and body be thoroughly inspected:

— each time the vehicle is serviced;
— whenever a change is noticed in the sound of the exhaust system; or
— whenever the exhaust system, underbody or rear of the vehicle is damaged.

Take the vehicle to your GM-H dealer if you think your vehicle needs inspecting for any of the above reasons.

DO NOT SIT IN A PARKED VEHICLE FOR ANY EXTENDED PERIOD OF TIME WITH THE ENGINE RUNNING AND DON'T LEAVE THE CHILDREN OR YOUR PETS IN THE VEHICLE EITHER.

DO NOT RUN THE ENGINE IN AN ENCLOSED AREA SUCH AS THE GARAGE, ANY LONGER THAN IS NEEDED TO MOVE THE VEHICLE.

Driving with the boot or tailgate open is not recommended. If you must travel with the boot or tailgate open, close all windows, fully open the ventilation system, turn ventilation fan control to maximum setting and do not exceed 50 km/h unless necessary.

# SAFETY CHECKLIST

**Before Entering the Car**

1. Check that windows, mirrors and lights are clean.
2. Check tyre inflation.
3. If you intend to reverse, check that the area behind your vehicle is clear.

**Before Driving Off**

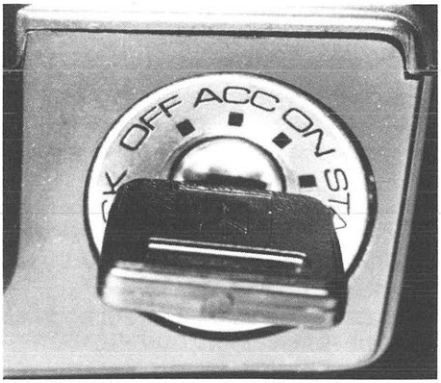
1. Be sure that all doors are secured.
2. Position your seat for comfortable driving.
3. Adjust rear vision mirrors.
4. FASTEN SEAT BELTS.
5. Check that the warning indicators light up when you turn the key to start the engine.

**Parking**

1. Apply the parking brake.
2. Place manual transaxle in Reverse gear and automatic transaxle in Park.
3. Turn ignition key to lock and remove key.
4. Shut all windows and lock all doors.

**CAUTION: Be careful where you park or drive. As with any vehicle, do not park or operate this vehicle in areas where combustible materials such as dry grass or leaves can come in contact with a hot exhaust system.**

This is an anti-theft lock and is situated on the right side of the steering column. It has five positions.




LOCK — The key can be inserted or removed only when the switch is in this position. This is the normal parking position, and locks the ignition and the steering wheel when the key is removed.

OFF — Permits turning the engine off without locking the steering wheel.

ACC — This allows you to use the electrical components — lighter, radio etc. — when the engine is not running. To reduce battery discharge, switch off all non essential components.

ON — Normal operating position. The ignition circuit and the electrically operated instruments are energised.

START — This cranks the engine. Immediately the engine starts take your hand off the key and allow it to return to **ON** position.

**CAUTION: Do not turn the engine off while the vehicle is in motion as this renders ineffective any power assisted equipment operated by the engine. Never remove the key while the vehicle is in motion as this will lock the steering of the vehicle.**

**NOTE:** If the steering lock is difficult to disengage when the vehicle has been parked with the tyres hard up against the kerb or with the steering wheel off-centre it may be necessary to rotate the steering wheel slightly to free up the ignition steering lock.

1. Apply the parking brake firmly and release only after you have started the engine and ready to drive off.
2. **Manual Transaxle**
   Depress the clutch pedal and shift the gear lever to Neutral Position. The clutch pedal can now be released.

   **Automatic Transaxle (where fitted)**
   Move the shift lever to 'P' (Park) or 'N' (Neutral) position. The engine will not start if it is in any other position.
3. Start the engine as outlined below **(with your foot off the accelerator).**

   For cold or hot starting the procedure is the same. Simply turn the key to START position and release when the engine starts. You do **not** have to depress the accelerator pedal prior to or during cranking.

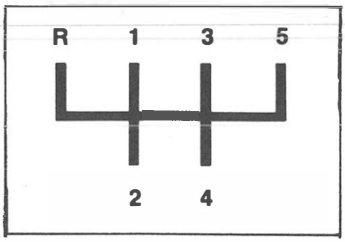
   **NOTICE: You should not subject the engine to high load conditions such as full throttle acceleration or high speeds until it has completely warmed up.**

## Flooded Engine

Cranking the engine for a lengthy period without it starting could result in there being too much fuel in the engine.

If this occurs, press the accelerator down to the floor and hold it there while holding the key in the START posiiton. When the engine starts, allow the accelerator pedal to come up slowly.

This transaxle has 5 fully synchronised forward gears and a non synchronised reverse gear. The shift pattern illustrated, is also found on the end of the gear shift lever.




When SELECTING FIFTH GEAR, you must shift the gear lever sideways against spring pressure in order to pass into the gear.

When SELECTING REVERSE GEAR, the slide on the gear lever just below the knob must be raised to allow the lever to pass into the R position.

**RECOMMENDED SHIFT SPEEDS**
Gear changes should be selected at the speeds indicated to ensure maximum exhaust emissions and fuel consumption.

| Gear Change | Speed |
|---|---|
| 1 — 2 | 20 km/h |
| 2 — 3 | 35 km/h |
| 3 — 4 | 45 km/h |
| 4 — 5 | 70 km/h |

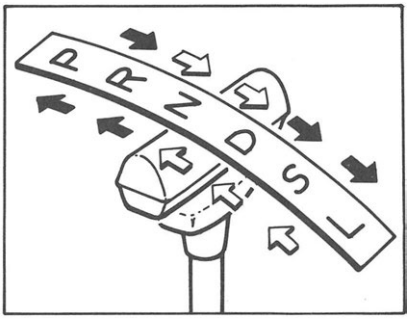
## OPERATING NOTES

- When shifting from one gear to another, be sure to fully depress the clutch pedal.
- Shift the gears with a moderate effort.
- Never attempt to engage reverse gear until the car has completely stopped. A slight pause between depressing the clutch pedal and moving into Reverse gear is desirable.
- Whenever Reverse is selected with the ignition on, the back-up lights will operate.
- When stopped on an incline do not hold the car by slipping the clutch. Use the foot brake or park brake.
- When climbing steep grades, change down to a lower gear before the engine starts to labour. To maintain safe speeds on a steep downgrade and to reduce brake wear and overheating, shift into a lower gear before starting the descent.
- Do not overspeed the engine when shifting down to the next lowest gear (maximum recommended engine speed — 6000 rpm).

RAISE THE RELEASE BAR below the T-bar handle when shifting to R or P and when shifting from D to S to L, as indicated by the arrow ➡

You may shift without using the release bar into any positions indicated by the arrow ⇨

NOTE: The engine will not start unless the selector is in P (Park) or N (Neutral).




| | |
|---|---|
| P — (PARK) | This stops the rear wheels from turning and so should be selected (together with the park brake) when leaving the vehicle. Never select P until your vehicle is fully stopped. |
| R — (REVERSE) | Never select R until your vehicle is fully stopped. Reversing lights will operate when R is selected and the ignition is on. After reversing, make sure the vehicle has fully stopped before proceeding forward again. |
| N — (NEUTRAL) | This is the out-of-gear position. You may then restart a stalled engine while the vehicle is still moving. |
| D — (DRIVE) | This is the normal forward driving position and allows the transaxle to choose the appropriate gear for the load and driving conditions. |
| S — (SECOND) | This position is used when it is desirable to prevent the transaxle changing into 3rd gear for going uphill, or for "engine braking" when going downhill. Do not use second gear ("S") for extended periods at speeds greater than 110 km/h. |
| L — (LOW) | This provides maximum 'engine braking' when driving down very steep hills or through heavy sand or mud. Do not use low gear at speeds greater than 65 km/h. |

## AUTOMATIC DRIVING DONT'S

- Don't rev the engine with the brakes on in either L, S, D or R. This will over heat the transaxle.
- Don't rev the engine to hold the car on a slope. Use the brakes.
- Don't ever coast the car in N — this lessens your control and the engine braking power.
- To ensure a smooth change when shifting from D down to S, momentarily take your foot off the accelerator pedal, select S, then again depress the accelerator.

# NEW CAR 'RUNNING-IN' PERIOD

These days, there's no need to follow the formal running-in schedule. However, by observing a few simple precautions during the first few hundred kilometres of driving you will greatly assist your car's future performance and economy.

For the first 500 kilometres, don't exceed 80 km/h. Up to 1,500 kilometres avoid driving at any one speed (either slow or fast) for any length of time.

Include some higher speeds during this period. Always drive at moderate speed until the engine has completely warmed up.

For the first 500 kilometres heavy braking should be avoided, except in an emergency.

# HOW TO REDUCE FUEL CONSUMPTION

**Vehicle Maintenance:** Maintain your vehicle in peak mechanical condition by having it serviced regularly, refer page 10-1.

**Tyre Pressures:** Keep the tyres at the recommended pressures. Refer page 6-11.

### Air Conditioner Operation

If fitted with air conditioning, use only when necessary. However, it must be remembered that the air conditioner needs to be run at least once a fortnight to help prevent drying out the compressor seals. Rever to A/C operating notes on page 1-12.

### Wheel Alignment

Maintain correct front wheel alignment. Incorrect alignment makes the front wheels drag and increases fuel consumption.

### Warm Ups and Excessive Idling

- Avoid long engine warm ups. They are unnecessary and waste fuel. An engine takes approximately five minutes to reach its efficient operating temperature and it does this most effectively by driving on the road.
- You should also avoid excessive engine idling. If you have to wait for more than a couple of minutes turn off the engine to conserve fuel.

### Accelerating, Driving and Braking

- Accelerate gently — avoid rapid starts, sudden bursts of speed and full throttle accelerations — they're certain fuel wasters.
- Drive the vehicle at steady speeds where possible (after run-in). It is desirable to achieve top gear operation, as soon as possible, but under no circumstances should you force the engine to labour in top gear.

**NOTICE:** "Riding the brake" by resting your foot on the brake pedal when you do not intend to brake can cause overheated brakes. This can wear out the brake linings and pads faster, damage the brakes and waste fuel.

## TYRE TRACTION

A decrease in driving, cornering and braking traction occurs when water, snow, ice, gravel or other material is on the road surface. Driving practices and vehicle speed should be adjusted to the road conditions.

## LOOSE ARTICLES

Do not leave loose articles or luggage in the passenger compartment. Whenever possible, stow articles in the luggage compartment. For wagons, loads stowed in the luggage area should be firmly secured.

## POWER STEERING (where fitted)

This system has been designed to reduce steering effort. Care should be taken not to hold a turning force on the steering wheel when stationary (i.e. when waiting before turning a corner, etc.) as this creates unnecessary, high operating pressures within the system.

If the power steering is rendered ineffective because the engine has stalled, the drive belt broken or if the pump reservoir is empty of fluid, the car can still be steered. However, due to the much greater effort required to steer, it is recommended that you have the problem fixed promptly.

## BRAKES

Driving through water may affect performance. Applying the brakes lightly will indicate whether they have been affected. To dry them quickly, drive slowly forward, then lightly apply the brakes, with an assured clear distance ahead until brake performance returns to normal.

Brake pedal travel should not be obstructed by ill-fitting floor mats or any other material under the pedal.

Also, your seat should be positioned so that you can reach the brake pedal satisfactorily under all braking conditions.

### Power Assisted Brakes

Power assisted brakes which are fitted to your car utilise vacuum from the engine when it is running. Never let the vehicle run down steep grades without the engine running.

**Never** coast with the engine switched off.

# Chapter 4

# Accidents & Emergencies

**PART A — ACCIDENTS**

Page
4A-1 — What to do at the scene of the accident
4A-2 — Medical Assistance

**PART B — EMERGENCIES**

Page
4B-3 — Hazard Warning Flashers
4B-3 — Towing a Car
4B-4 — Changing a Wheel
4B-7 — Engine Overheating
4B-9 — Starting when the Battery is Flat

All motorists are advised to learn what to do at the scene of an accident, particularly where persons are injured. Injured people can choke to death if their air passages are not cleared. They can bleed to death unless the bleeding is stopped. They may require mouth-to-mouth resuscitation, may have to be moved, even though badly injured. It is important that you understand how to avoid further damaging an injured neck or back or other broken limbs.

The following notes may help.

- **Part 1. Accident — being involved.**
- **Part 2. Accident — being a witness.**
- **Part 3. Medical assistance.**

## Part 1. Accident — being involved

If you are involved in an accident you are advised to do as follows:

Stop immediately and remember to turn off the engine and apply park brake.

Remember that time is vital. Remain calm and alert. Think quickly and clearly.

Give all possible assistance to all injured persons. (See Part 3 Medical Assistance).

Send for police and ambulance if anyone has been injured. Send information as accurately as possible. Give the exact location, the number of injured people and a brief report on the overall situation.

Perhaps take charge of the situation.

Warn all other traffic approaching the scene. Turn off ignition switches. Stop any smoking near spilt petrol. In darkness, try and light up the area to warn others.

Clear the road of accident debris.

Exchange your name, address, vehicle registration number and the vehicle owner's name and address with the other parties involved in the accident.

If damage to property only has occurred, report the facts to the owner of the damaged property or to his or her representative; to any police present at the scene or to the nearest Police Station.

Try and note all important facts because such details may be important if needed later.

## Part 2. Accident — being a witness

If you witness a road accident or it becomes your task to stop and help at the scene of an accident, do this:

Keep in mind that an observant witness can prove most helpful. Some day you yourself might be very glad of help from a witness.

DO NOT stop at the scene of an accident *just to be a spectator.*

Where other people are already in attendance and giving assistance, **you should stop only if you can contribute assistance.**

Give what assistance you can to any injured persons. (See Part 3 Medical Assistance.)

Follow most of the steps suggested in Part 1. Perhaps you may have to take charge of the accident situation.

## Part 3. Medical assistance

Keep calm and think clearly.

Your experience may not be much but do your best. Don't just stand by and let an injured person die.

- Look after the unconscious person first. Check for breathing. If no breathing, then check if air passages are clear, i.e. nose and mouth. Use your fingers to clear air passages if necessary. If the air way is clear then mouth-to-mouth resuscitation may be needed at once.

*Unconscious people can choke.*
*Carefully turn to one side.*
*Tilt the head back slightly.*
*Wipe out the mouth with your finger to remove blood, vomit, broken teeth or dentures.*

- You must be most careful in moving an injured person. Often it is best not to move at all but in conditions of danger, this is not always possible. Serious and permanent damage can be done to an injured neck or back if not supported during movement. NEVER BEND A NECK OR BACK. KEEP THEM STRAIGHT. All injured limbs require support when an injured person has to be moved.
- Provided it is not dangerous to do so because of other injuries, an unconscious person will do best in the "coma position" illustrated here.

*Lay the person on one side and — if it will not aggravate any injuries — then:*
*Bend the uppermost knee until the thigh is at right angle to the body.*
*Bend the uppermost arm and elbow so that the hand lies near the face.*
*Gently pull the underneath arm so that is rests straight on the ground free of any body weight.*

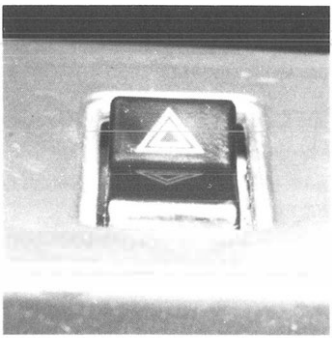
- Try to stop bleeding by applying direct pressure, using your hands, or by pressing torn flesh together. Use any clean cloth available. Fold cloths to make pads. If necessary press one pad on top of another. Keep pressure around edges of a wound BUT NEVER USE A TOURNIQUET.

  Shock may be treated by reassurance, relieving pain, controlling any bleeding and keep ing the injured person warm *but not hot.* Best not to give any fluids and NEVER ALCOHOL.

- If the injured person is in danger and has to be moved, try and have three or four people help and concentrate on not bending the neck, spine and injured limbs. **Keeping the neck and spine straight is most important.**

*Illustrations reproduced from "The Victorian Road Code" with permission from Road Safety and Traffic Authority of Victoria.*

## Hazard Warning Flasher



Use the hazard warning flasher to warn other drivers any time your vehicle becomes a traffic hazard, day or night. Avoid stopping on the roadway if possible.

- Turn on the hazard warning flasher by pushing the switch located on the top face of the steering column cover. This makes all four turn signal lights flash continuously. The dash mounted turn signal indicator lights will also flash.
- The flasher will work with the ignition either off or on.
- USE OF THE HAZARD WARNING SYSTEM WHILE THE VEHICLE IS MOVING IS PROHIBITED BY LAW IN SOME STATES.

## Towing a Disabled Vehicle

Proper lifting or towing equipment is necessary when lifting or towing the vehicle to prevent damage to it during any towing operations. State and Local laws must be followed. In an emergency, your vehicle may be towed on all four wheels in the following manner.

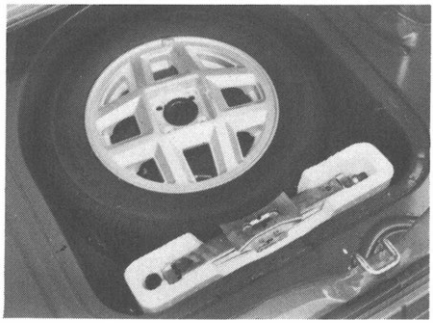
- Fit the towing equipment to one of the towing eyes on the front subframe below the front bumper. Do not attach to bumpers or brackets.
- Place transaxle in neutral position and release the handbrake.
- Switch ignition key to "ACC" to release steering column lock and to permit operation of windshield wipers and turn signals.
- For the sake of safety and to prevent damage to the vehicle it is advisable to avoid jerky movements and to drive slowly during towing operations.
- Remember that power assist for brakes and power steering (where fitted) will not be available when the engine is off.
- To prevent the entry of exhaust fumes from the towing vehicle into the passenger compartment of your vehicle, close the windows and stop entry of air by moving heating and ventilation controls to OFF position.
- Vehicles with automatic transaxles should not be towed faster than 50 km/h and no further than 60 km. If a speed of 50 km/h or distance of 60 km is to be exceeded, the front of the vehicle must be raised when towing.
- Vehicles with damaged transaxles must not be towed with the front wheels on the ground. The front of the vehicle must be raised when towing.
- Only the driver should be in a towed vehicle.

CAUTION
* Use jack only for lifting this car when changing wheels.
* Never get beneath the car when it is only supported by the jack.
* Do not start or run the engine while the car is only supported by the jack.
* All passengers should be out of the car when it is being jacked.

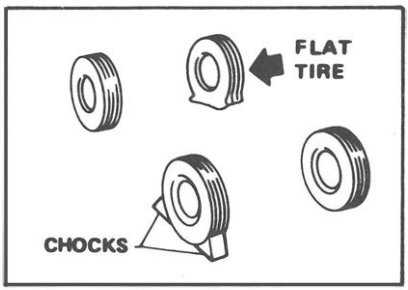
1. Park on level surface and set parking brake firmly.

2. Set automatic transaxles in park (manual transaxles in reverse) and remove ignition key.

3. Remove the spare wheel, jacking equipment and wheel nut wrench which are stored in the luggage compartment, under the floor cover. The spare wheel is secured by a wing nut. The jack and tools are in a moulded compartment located at the rear of the spare wheel.



4. Block the wheel diagonally opposite the jacking position.



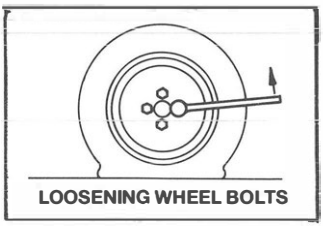

5. Remove the wheel trim:

   SL — Insert the blade of the wheel nut wrench between the wheel and the cap at the cap recess provided and gently lever off by moving the wrench towards the wheel.

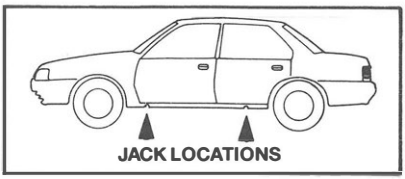
   SL/X — Push the blade of the wheel nut wrench in between the wheel cover and force it in for about half the length of the blade. Moving round the wheel, lightly pry the cover off at several points by twisting the wrench away from the tyre.

   SL/E — Place the blade end of the wheel wrench in the slot in the wheel and gently prise off.

6. Loosen, but do not remove, wheel bolts by turning wrench counter-clockwise.

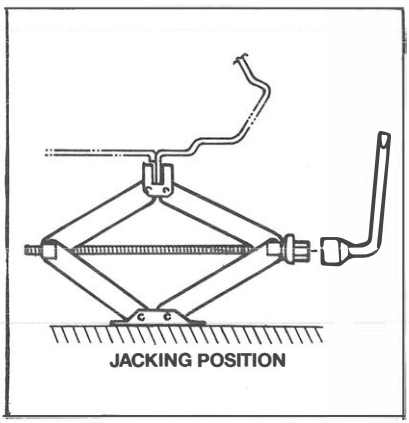

LOOSENING WHEEL BOLTS

7. Place jack below the jack location nearest the wheel to be changed. There are four jack locations, two either side at front and rear of vehicle.


JACK LOCATIONS

Raise the jack to engage the "U" shaped lifting foot of the jack over the underbody flange at the jack location.

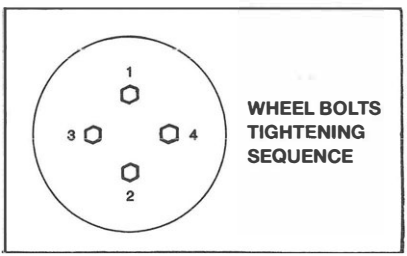
Immediately prior to lifting the car ensure that base of jack is located on the ground directly below the jack location so that the whole 'base' area is in contact with the ground. Refer illustration opposite.


JACKING POSITION

CAUTION: Failure to position the jack as described could result in serious personal injury or car damage caused by the car slipping off the jack.

8. Raise the car until the wheel is clear of the ground. Remove the wheel bolts and avoid losing them or getting dirt in the threads. Remove the wheel and change it over with the spare.

9. Tighten the wheel bolts finger tight and then lightly tighten using the wrench.



WHEEL BOLTS TIGHTENING SEQUENCE

10. Lower the car completely and remove the jack.
11. Fully tighten wheel bolts with the wrench using the tightening sequence illustrated.

12. Replace wheel trim:
    SL: Position the centre cap in the wheel cavity and press firmly into position.

    SL/X: Position the cover so that the valve hole in the cover is directly over the valve. While pressing the cover firmly against the wheel at the lowest position, knock the cover onto the wheel with several light blows using the palm of the hand. Repeat this operation at several positions around the edge of the cover until a secure installation is obtained. Note, it may be necessary to protect the hand during this operation.

    SL/E: Position the cap in the cavity with the base opposite the slot edge in position, then knock the cap into the cavity with the palm of the hand.

13. Stow the tools and changed wheel in the luggage compartment, as shown on previous page.

**CAUTION: As soon as possible after changing a wheel, you should have the wheel bolts tightened with a torque wrench to 90-100 Nm (70-76 ft.lbs.).**

**Wheel bolts should be tightened evenly to correct torque in the numerical sequence shown.**

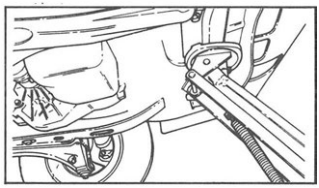
**Improperly tightened wheel bolts could eventually allow the wheel to come off while the car is moving!**

## Lifting your Camira with a Mobile (Trolley) Jack

If you intend lifting your car with a trolley jack, remember that the same cautions (as appear on page 4B-4) apply and should be strictly adhered to.

**LIFTING THE FRONT OF A CAMIRA**

The trolley jack should be placed under the centre of the front, lower tie bar, behind the front bumper (as shown) and safety stands placed under the front corners of the rocker panel. A rubber pad should be placed between the jack and tie bar.

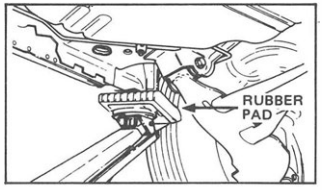


**NOTE: A Camira should never be lifted with a jack positioned under either the right hand or left hand front lower control arm — damage to the control arm will result!**

**LIFTING THE REAR OF A CAMIRA**

**NOTE:** NEVER lift a Camira under the rear axle beam with a trolley jack — damage to the beam or its corrosion protection paint may result.

The trolley jack must be placed (in turn) under the rear corner of each rocker panel, as shown. To prevent possible damage to the rocker panel flanges or brake and fuel lines, a rubber pad (similar to those used on garage hoists) should be fitted between the jack and the rocker panel. Raise the car to the required height and install safety stands under the rocker panel(s).



**CAUTION: If the engine should overheat, as indicated by the Temperature Gauge reading or if you suspect there is a serious overheat condition immediate action is required as outlined in the following section. Continued operation of the engine EVEN FOR A SHORT TIME could result in a fire and the possibility of personal injury and/or severe vehicle damage.**

If the coolant temperature gauge needle should move all the way to "H" position and remain there for more than 30 seconds, pull out of the traffic as soon as it is safe to do so and stop the car. Leave the engine idling for a few minutes, whilst you step out of the car to check that the electric cooling fan is working. If the fan is working and the temperature gauge needle has not returned to its normal position within this time then **stop** the engine and proceed as follows:

**CAUTION: To help avoid being burned:**

- **Do not open the engine hood if you can see or hear steam or coolant escaping from the engine compartment. Wait until no steam or coolant can be seen or heard before opening the hood.**
- **Do not remove the coolant surge tank cap if the engine and radiator are still hot. Scalding fluid and steam can be blown out under pressure which is likely to cause serious personal injury.**

If no steam or coolant can be seen or heard, raise the engine hood. **If the coolant is boiling, wait until it stops before proceeding.** Look at the coolant level in the see-through surge tank. The coolant level should be at or above the 'Cold' mark on the tank.

If the coolant level in the surge tank is low, look for leaks at the radiator hoses and connections, heater hoses and connections, radiator, and water pump. If you find major leaks, or spot other problems that may have caused the engine to overheat, do not run the engine until these problems have been corrected. If you do not find a leak or other problem, then the cooling system should be topped up with specified coolant.

**CAUTION: Do not remove the radiator cap if the engine and radiator are still hot. Scalding fluid and steam can be blown out under pressure which is likely to cause serious personal injury.**

When the engine has cooled sufficiently, remove the radiator cap as follows:

Cover the radiator cap with a thick cloth and turn it slowly anti-clockwise until it reaches a "stop". Do not press down while turning the cap.

Wait until any remaining pressure (indicated by a hissing sound) is relieved, then press down on the cap and continue turning it anti-clockwise until it can be removed.

Check the coolant level add water if necessary with the engine idling. Top up recovery reservoir if required. After taking one or more of the actions above and once the Temperature Gauge no longer signals an overheat condition you can resume driving at a reduced speed. Return to normal driving after ten minutes if the Temperature Gauge does not again show an overheat condition.

If overheating occurs again you should have your car attended to, as soon as possible, by a qualified mechanic.

**NOTE:** Your car's engine may temporarily operate at high temperature during more demanding operating conditions especially on very hot days. These conditions include:—

- climbing a long hill
- stopping immediately after high speed driving
- idling for long periods in traffic or
- towing a heavily laden trailer or caravan.

You should avoid operating your car for prolonged periods in any of the above circumstances if the Temperature Gauge indicates high engine coolant temperature.

Refer to page 6-4 which gives maintenance instructions to help protect your cooling system from overheating.

CAUTION: DO NOT attempt to 'push start' or 'tow start' your Camira. These cars are fitted with a catalytic converter and if uncombusted fuel were to reach the catalytic converter and ignite, the converter could overheat or be destroyed by backfire.

If your car will not start due to a flat battery, it can often be started by using energy from another battery — a procedure called 'jump starting'.

However, if after reading the following procedure you are still unsure about 'jump starting', we strongly recommend for your safety and that of your car that you leave the starting to a competent mechanic.

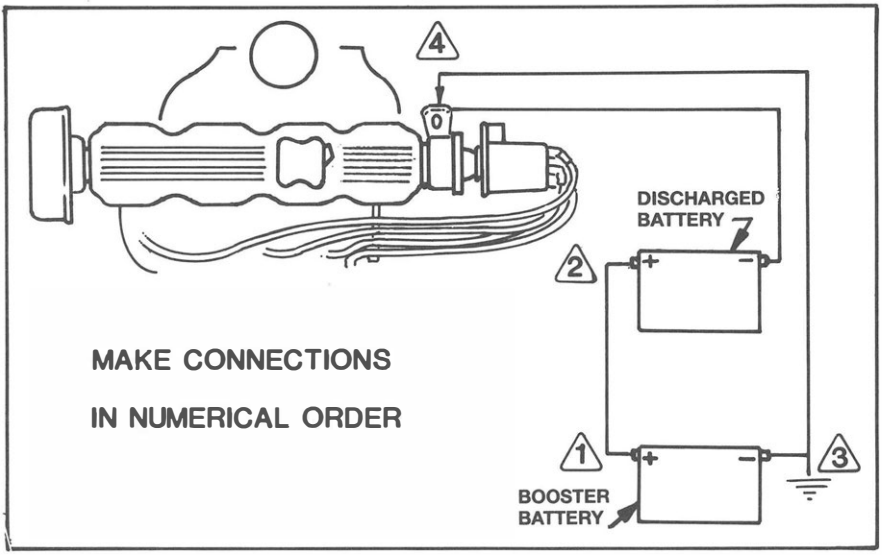
## Jump Starting

**CAUTION: Batteries produce explosive gases, contain corrosive acids and supply levels of electrical current high enough to cause burns. Therefore to lessen the chance of personal injury when working near a battery:**

- **Do not expose the battery to open flames or sparks. Battery action generates hydrogen gas which is inflammable and explosive.**
- **Do not smoke near a battery.**
- **Wear eye protection such as industrial safety glasses and avoid leaning over the battery whenever possible.**
- **Do not allow battery acid to contact eyes or skin. Flush any contacted area with water immediately. In case of eye contact you should get medical help. Battery acid will also damage paintwork and fabrics if not washed off immediately.**
- **Be sure any batteries that have filler caps are properly filled with fluid.**
- **Remove rings, metal watch bands and other metal jewellery before working around a battery.**
- **Carefully follow each step in the jump starting procedures. Also, never use a quick charger to start your engine.**

1. The battery of your car has a negative earth and a 12 volt rating. The battery in the other vehicle — that is being used to jump start the flat battery — must be the same voltage and also have a negative earth. So, check the specifications in the other car's owner manual to see if it complies. Serious injury or damage may result if the wrong type of battery is used to energise the flat battery.

2. Position the two vehicles so that they are **not** touching and apply the parking brakes. Automatic transaxles are to be placed in 'PARK' and manual transaxles in 'NEUTRAL'. Turn off ignition and all lights and accessories in both cars, except the hazard flasher or any lights needed for the work area.




3. Attach one end of the first jumber cable to the positive terminal of the **booster battery** (identified by a red colour, + or P on the battery case, post or clamp) and the other end of the same cable to the positive terminal of the **discharged battery.**

4. Attach one end of the second jumper cable to the negative terminal (black colour, – or N) of the **booster battery,** and the other end to a solid, stationary, metallic point on the engine of the car with the discharged battery **Do not connect directly to negative post of the discharged battery).**

5. When making all connections take care that the clamps from one cable do not inadvertently touch the clamps on the other cable. Also ensure that jumper cables are not on or near pulleys, fans or other points that will move when the engine is started.

6. Start the engine in the car which has the good battery and run the engine at a moderate speed. Then start the engine in the car that has the discharged battery.

7. When the engine starts, leave it running then remove the jumper cables by reversing the above installation sequence exactly. While removing each clamp, take care that it does not touch any other metal while the other end remains attached.

# Chapter 5
# Warranty

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## HOLDEN'S MOTOR COMPANY

# *New Vehicle Warranty*

HOLDEN'S MOTOR COMPANY HEREBY WARRANTS THAT IT WILL MAKE GOOD, WITHOUT CHARGE, ANY DEFECT WHICH APPEARS IN THE VEHICLE IDENTIFIED IN THE VEHICLE IDENTIFICATION CERTIFICATE FOUND ON THE INSIDE OF THE FRONT COVER.

*Provided*

1. the defect has been notified to an authorised GM-H Dealer or Service Dealer:
   (a) before the vehicle has travelled a distance of 20,000 km, or:
   (b) within 12 months of the date of delivery of the vehicle to the first retail purchaser (or in the case of a Demonstrator vehicle within 12 months of the date when it was first placed into service by the Dealer) whichever comes first, and
2. the vehicle has been returned to an authorised GM-H Dealer or Service Dealer

   *And*

3. the Dealer has determined that the defect complained of *is* one of material or workmanship and *is not* caused by:
   (a) misuse or abuse of the vehicle such as by racing, rallying, overloading, etc. or by neglect.
   (b) operation of the vehicle after it is known to be defective
   (c) accident or deliberate act
   (d) atmospheric fallout or flood, hail, salt, etc.
   (e) failure to carry out proper maintenance service
   (f) use of incorrect types and grades of fuel, oil or lubricants
   (g) alteration or modification of the vehicle
   (h) the fitting of parts or accessories not marketed by Holden's Motor Company
   (i) any work carried out on the vehicle by someone other than an authorised GM-H Dealer or Service Dealer,

BY THE DEALER (or as otherwise decided by Holden's) MAKING GOOD THE DEFECT BY REPAIR OR, AT THE OPTION OF HOLDEN'S, BY REPLACEMENT.

*Excluded from this Warranty are*

- defects in tyres (these being warranted by their manufacturers), and services such as enging tuning, brake adjustment, replacement of air and oil filters, wiper rubbers, etc. which are required as part of normal vehicle maintenance.

This Warranty applies only to vehicles operated in Australia and is given to the person who is entitled to possession of the vehicle whether as owner, lessee or otherwise and is given in addition to all rights conferred by law on that person.

Owners of vehicles operated outside Australia should consult their local dealer regarding the warranty applicable to their vehicles.

# SPECIAL NOTICES TO OWNERS

**AVAILABILITY OF SERVICE AND PARTS AFTER WARRANTY**

Holden's Motor Company has franchised dealers in many parts of Australia for the sale of service parts and the provision of service to owners of Holden's products. Every endeavour is made to ensure that such dealers carry adequate stocks of service parts and are equipped to provide satisfactory service, but Holden's Motor Company does not make any promise that after the expiration of the warranty such parts or service facilities will be available, or available at any specific location or at any particular time.

**UNAUTHORISED STATEMENTS IN RELATION TO HOLDEN'S PRODUCTS**

No GM-H dealer or other person is authorised or permitted to give or make any statement assertion or undertaking in relation to the quality, performance, characteristics, descriptions or fitness for any purpose of any Holden's product or in connection with the supply of any Holden's product, which is at variance with any written statement assertion or undertaking on any of these subjects given or made by Holden's Motor Company in its published sales literature, and the Company does not accept any liability for any such unauthorised action.

**WARRANTY ON HOLDEN'S REPLACEMENT PARTS**

Holden's Motor Company warrants in respect of Holden's parts and accessories required as replacement parts, that it will make good by repair or at its option by replacement any defect occurring in any such Holden's parts and accessories within 12 months from the date of acquisition or in the case of a Holden's part or accessory which has been installed in a vehicle by a GM-H Dealer or Service Dealer before such vehicle has travelled a distance of 20,000 kms from the date of installation, whichever first occurs.

This section is designed to assist you in understanding the terms of the Holden's Warranty provided with your new car.

The following are some of the most frequently asked questions for which detailed answers have been provided.

**1. Q. How do I go about obtaining Holden's Warranty Service?**

**A.** It is the responsibility of the Selling Dealer to provide Holden's Warranty Service, therefore you should take your car to that Dealer whenever Holden's Warranty Service is required. However, if this is not possible, you may go to any other Authorised GM-H Dealer. The details recorded inside the front cover of this book are required by the Dealer whenever you request Holden's Warranty Service.

Note that the 1500 kilometre Warranty Service may be carried out by any GM-H Dealer, provided you have a letter of introduction from the Selling Dealer. This letter must be arranged prior to obtaining the 1500 kilometre service.

**2. Q. What should I do if, in an emergency, Holden's Warranty Service is required and an Authorised GM-H Dealer is not available to provide such service at that time?**

**A.** If in an emergency, a repair, replacement or adjustment (covered by the Holden's New Vehicle Warranty) is required to enable your car to be operated safely and it is not practical for you to have that service performed by an Authorised GM-H Dealer, the service (to the extent that it is necessary to enable your car to be operated safely) may be performed by any other qualified service technician or repairer. A claim for the reasonable cost may be made through the Authorised GM-H Dealer who would normally provide you with Holden's Warranty Service. You must also take your car to the Authorised GM-H Dealer for inspection of the service and/or the completion of any required Holden's Warranty Service as soon as possible.

**3. Q. What should I do if my car becomes unsafe or inoperative as a result of a defect which is covered by the Holden's New Vehicle Warranty?**

**A.** You should contact the nearest Authorised GM-H Dealer as soon as possible and arrange for that Dealer to carry out the required Holden's Warranty Service.

**4. Q. Will I have to pay for any costs or expenses in connection with the provision of Holden's Warranty Service?**

**A.** All parts and labour used in carrying out Holden's Warranty Service at the premises of the Servicing Dealer are free of charge. Whenever Holden's Warranty Service is to be carried out by the Servicing Dealer it is your responsibility to deliver your car to the Servicing Dealer's premises.

If, as a result of a defect which is covered by the Holden's New Vehicle Warranty, your car cannot be driven safely and you arrange for the nearest Authorised GM-H Dealer to carry out the required Holden's Warranty Service, Holden's will accept reasonable towing costs to move your car to the nearest GM-H Dealer's premises. Before employing a towing company, contact the nearest GM-H Dealer and/or the Holden's Zone Office to obtain guidance.

**5. Q. Are damage or injury, loss of time, inconvenience, commercial or other direct or indirect loss covered by the Holden's New Vehicle Warranty?**

**A.** No, these items are not covered. The Holden's New Vehicle Warranty only covers the repair, replacement or adjustment of those parts of your car which are found to be defective in materials or workmanship. No other types of claim for compensation of any kind, even if the same resulted from a consequence of a defect in materials or workmanship in your car will be recognized under the Holden's New Vehicle Warranty. The rights and remedies which are available to you under any relevant Statutory Enactment or otherwise, at law, in connection with any such claim for compensation, you must pursue outside the ambit of the Holden's New Vehicle Warranty.

**6. Q. Will I have to pay for Maintenance costs during the Warranty Period?**

**A.** Maintenance costs are not covered by the Holden's New Vehicle Warranty. However, the scheduled 1500 kilometre service specified in chapter 10 of this book is free of charge (except for any lubricants used), provided that your vehicle has been operated under normal operating conditions (refer page 10-2) and provided also that no modifications (other than a modification made by or at the direction of Holden's) has been made to your car. The Maintenance Schedules in this book specify the minimum maintenance required for your car operating under normal conditions.

The Maintenance items, except where they are required as a result of defects in materials or workmanship, for which you will be required to pay include:-

- Engine tune-up — including replacing spark plugs,
- Replacement of all filters.
- Cleaning or flushing of fuel, coolant, brake, engine, transaxle after the 1500 kilometre service.
- Adding to or replacing lubricants.
- Adding to or replacing air conditioning refrigerant.
- Any necessary adjustments to drive belts, transaxles, clutch, parking brake, etc.
- Wheel balancing — after 5,000 kilometres.
- Wheel alignment.
- De-dusting or de-glazing of brake linings or pads — after the 1500 kilometre service.
- Brake lining wear or damage.
- Brake disc pad or disc wear.
- Battery re-charging.
- Paint, bright metal finish and trim, due to normal deterioration.
- Body panel adjustment — after the 1500 kilometre service.
- Door, engine hood or rear compartment lid lock adjustments.
- Glass or channel adjustments — after the 1500 kilometre service.
- Body rattle, squeaks and general tightening of bolts, fastenings and fittings — after the 1500 kilometre service.
- Chipped glass or breakage.
- Torn or damaged floor mats or carpets.

**7. Q. Are my tyres covered by the Holden's Vehicle Warranty?**

**A.** No. The tyres fitted to your car are covered by a separate warranty provided by the tyre manufacturer. An Authorised GM-H Dealer will assist you by discussing any queries which you might have with respect to the tyre manufacturer's warranty with the tyre manufacturers' representative.

**8. Q. Are Holden's Part and Accessories covered by warranties?**

**A.** If you purchase a Holden's Part or Accessory from an Authorised GM-H Dealer it will be warranted by that Dealer under the Holden's Parts and Accessories Warranty against defects in materials or workmanship for a period of 12 months from the date at which you purchased it. In the case of a Holden's Part or Accessory which has been installed in a car by a GM-H Dealer or a Service Dealer it will be warranted for a period of 12 months or a distance of 20,000 kms from the date of installation, whichever occurs first.

Maintenance items such as filter, spark plugs, wiper blades and brake pads/linings will require replacement as part of normal maintenance. Such replacements are not the subject of this warranty.

We want you to be happy with your new vehicle together with the people you deal with while you have the vehicle.

Normally, any problems which may arise with the sales transaction, operation or servicing of your vehicle will be handled by your Dealer's Sales and Service department.

We realise however, that, with the best intentions, misunderstandings do occur sometimes.

Accordingly, we suggest you discuss any concern with one of the Dealer's management people. If you feel you haven't received satisfaction from the Sales Manager or Service Manager — go to the General Manager or to the Dealer himself.

By now you should have satisfaction. If not, you have the facility of the Holden's Customer Assistance Service office at your disposal. The Holden's Customer Assistance representatives can be telephoned from anywhere within Australia outside the Melbourne Metropolitan area (for only the cost of a local call) on 008 03 3349. The Melbourne area number is 646 5466.

If your concern relates to parts/accessories and you have made contact with the Dealer or Distributor without satisfaction, you may contact Holden's Parts & Accessories Division on (03) 797 7341.

Naturally, telephoning is both the quickest and the best way of contact. However, if you prefer to write the address is:

The Manager
Holden's Customer Assistance Services
GPO Box 548D
Melbourne, 3001

Your letter should clearly outline your concern or query, and include the following:

— Your name and address
— Telephone numbers, both Private and Business
— Selling dealership name and address
— Servicing dealership name and address
— Vehicle model
— Vehicle identification number (VIN)
— Date of purchase
— Current odometer reading

Most of this information will be found on the vehicle identification certificate, located inside the front cover of this book.

Before you write however, remember that the telephone is the quicker and more efficient means of communication.

## N.S.W. Metropolitan

*(Note: Dealership names and locations listed are effective at the time of printing. These may change from time to time without notice.)*

ARNCLIFFE
**Suttons Motors (Arncliffe) Pty. Ltd.,**
93 Princes Highway

ASHFIELD
**Muirs Motors (Ashfield) Pty. Ltd.,**
252 Parramatta Road

BALGOWLAH
**Boyded Balgowlah**
164 Condamine Street

BAULKHAM HILLS
**Tony Packard Holden**
Cnr. Victoria Avenue & Windsor Road

BLACKTOWN
**West City Motors Pty. Ltd.,**
120-128 Sunnyholt Road

CABRAMATTA
**Ron Hodgson Holden**
266 Hume Highway

CAMPBELLTOWN
**Paul Wakeling Holden**
Cnr. Blaxland & Campbelltown Rds.

CHULLORA
**Suttons Motors (Chullora) Pty. Ltd.,**
Cnr. Hume Highway & Waterloo Road

CROW'S NEST
**J. N. Caldwell (Holdings) Pty. Ltd.,**
1 Alexander Street

DEE WHY
**Barry Smith Holden**
Cnr. May and Mooramba Roads

GORDON
**Sundell Holden**
Cnr. Pacific Hwy. & McIntyre St.

HOMEBUSH
**Suttons Motors (Homebush)**
112 Parramatta Road

HOMEBUSH
**Gilbert & Roach Pty. Ltd.,**
167-173 Parramatta Road

KINGSFORD
**John Pelligrini Holden**
263-271 Anzac Parade

LAKEMBA
**Nash Holden**
1018 Canterbury Road

LIVERPOOL
**A. C. McGrath & Co. Pty. Ltd.,**
Cnr. Castlereagh St. & Hume Highway

MIRANDA
**Greg Ball Holden**
1-3 Kiora Road

NEWPORT
**Mobil-Newport**
Cnr. Barrenjoey Road & Seaview Avenue

PASTOW
**Purnell Bros. Holden**
19 Davies Road

PARRAMATTA
**Boyded Parramatta**
65 Church Street

PENNANT HILLS
**Les Vagg Holden**
351-355 Pennant Hills Road

PENRITH
**Lance Motors (Penrith) Pty. Ltd.,**
39-47 Henry Street

RANDWICK
**Boyded Randwick**
265 Avoca Street

ROCKDALE
**Boyded Rockdale**
517 Princes Highway

RYDE
**Muirs Motors (Ryde) Pty. Ltd.,**
603-605 Victoria Road

ST. MARY'S
**Lance Motors Pty. Ltd.,**
Cnr. Glossop & Harris Streets

WAITARA
**Sutton Motors**
90 Pacific Highway

WARRAWONG
**Dwyers Warrawong**
King Street

WINDSOR
**Erichsen Motors**
122 George Street

## N.S.W. Country

Consult your local Yellow Pages under Motor Cars — New for Addresses and Telephone Numbers.

- ADELONG
- ALBURY
- ARDLETHAN
- ARMIDALE
- BALLINA
- BARADINE
- BARHAM
- BATHURST
- BEGA
- BELMONT
- BELLINGEN
- BLAYNEY
- BOMBALA
- BOURKE
- BOWRAL
- BREWARRINA
- BROKEN HILL
- CANOWINDRA
- CARDIFF
- CASINO
- CESSNOCK
- COBAR
- COFF'S HARBOUR
- COLLARENEBRI
- CONDOBOLIN
- COOLAMON
- COOMA
- COONABARABRAN
- COONAMBLE
- COOTAMUNDRA
- COROWA
- COWRA
- CROOKWELL
- CULCAIRN
- DENILIQUIN
- DORRIGO
- DUBBO
- DUNGOG
- EDEN
- FINLEY
- FORBES
- GILGANDRA
- GLEN INNES
- GLOUCESTER
- GOSFORD
- GOULBURN
- GRAFTON SOUTH
- GRENFELL
- GRIFFITH
- GULARGAMBONE
- GUNDAGAI
- GUNNEDAH
- GUNNING
- GUYRA
- HARDEN
- HAY
- HOLBROOK
- INVERELL
- JERILDERIE
- JUNEE
- KANDOS
- KATOOMBA
- KEMPSEY
- KIAMA
- KURRI KURRI
- KYOGLE
- LAKE CARGELLIGO
- LEETON
- LISMORE
- LITHGOW
- MACKSVILLE
- MACLEAN
- MAITLAND
- MILTON
- MOREE
- MORUYA
- MUDGEE
- MULLUMBIMBY
- MUNGINGI
- MURWILLUMBAH
- MUSWELLBROOK
- NARRABRI
- NARRANDERA
- NARROMINE
- NEWCASTLE
- NOWRA
- NYNGAN
- ORANGE
- PARKES
- PEAK HILL
- PORT MACQUARIE
- QUIRINDI
- SCONE
- SINGLETON
- SPRINGWOOD
- TAMWORTH
- TAREE
- TEMORA
- TENTERFIELD
- TORONTO
- TUMBARUMBA
- TUMUT
- TWEED HEADS
- WAGGA
- WALCHA
- WALGETT
- WALLA WALLA
- WARIALDA
- WARILLA
- WARREN
- WAUCHOPE
- WELLINGTON
- WEST WYALONG
- WINGHAM
- WOLLONGONG
- WOODENBONG
- WYONG
- YASS
- YOUNG

## AUSTRALIAN CAPITAL TERRITORY

CANBERRA CITY
**Beazley & Bruce Pty. Ltd.,**
44 Mort Street

PHILLIP
**Commonwealth Motors Pty. Ltd.,**
158 Melrose Drive

BELCONNEN
**Gerald Slaven Holden**
Josephson Street

# Vic. Metropolitan

BERWICK
**Neil & Ross Neilson**
755 Princes Highway

BRAYBROOK
**Kevin Dennis Holden**
272 Ballarat Road

BUNDOORA
**Davies Dwyer Pty. Ltd.,**
413 Grimshaw Street

BURWOOD
**Dustings Hillyer**
1200 Toorak Road

CAULFIELD
**Booran Holden**
1049 Glenhuntly Road

CHELSEA
**Harrison Holden**
370 Nepean Highway

CHELTENHAM
**Balmoral Holden**
1212 Nepean Highway

DANDENONG
**Patterson Cheney Pty. Ltd.,**
200 Cheltenham Road

DANDENONG
**Graeme Blanchard Holden**
Princes Highway

DONCASTER
**Lance Dixon Holden**
601 Doncaster Road

ELSTERNWICK
**Reg Hunt Motors**
77 Nepean Highway

ESSENDON
**Preston Motors (Essendon) Pty. Ltd.,**
205-211 Keilor Highway

FAWKNER
**Mantello Holden**
1263 Sydney Road

FERNTREE GULLY
**Neilson Holden F.T.G.**
980 Burwood Highway

FOOTSCRAY
**Alan Mance Holden**
435 Barkly Street

FOOTSCRAY
**Patterson Cheney Pty. Ltd.,**
130 Moreland Street

FRANKSTON
**Noel Gould Holden**
140 Dandenong Road

GEELONG
**R. & B. Smith Pty. Ltd.,**
510 Moorabool Street

GEELONG
**Winter & Taylor (Sales) Pty. Ltd.,**
23 Cavendish Street

GLEN WAVERLEY
**Geoff Brady Holden**
565-577 Springvale Road

HASTINGS
**Westernport Holden**
762 Flinders Road

HEIDELBERG WEST
**Arthur Ellis Holden**
66 Bell Street

LILYDALE
**Noel Dight Holden**
Main Street

MORNINGTON
**Peninsula Holden**
Cnr. Nepean Highway & Tyabb Road

OAKLEIGH
**Garry & Warren Smith Pty. Ltd.,**
1575 Dandenong Road

RINGWOOD
**Paterson Cheney Holden**
45-57 Maroondah Highway

SOUTH MELBOURNE
**Patterson Cheney Holden**
132 Sturt Street

WERRIBEE
**Ballan Holden**
Princes Highway

WEST MELBOURNE
**Reg Hunt Motors**
577 King Street

## Vic. Country

Consult your local Yellow Pages under Motor Cars — New for Addresses and Telephone Numbers.

- ALEXANDRA
- ARARAT
- BACCHUS MARSH
- BAIRNSDALE
- BALLARAT
- BENALLA
- BENDIGO
- BIRCHIP
- BOORT
- CAMPERDOWN
- CASTERTON
- CASTLEMAINE
- COBRAM
- COHUNA
- COLAC
- COLERAINE
- CORRYONG
- DAYLESFORD
- DERRINALLUM
- DIMBOOLA
- DONALD
- ECHUCA
- EUROA
- HAMILTON
- HOPETOUN
- HORSHAM
- KANIVA
- KERANG
- KOOWEERUP
- KORUMBURRA
- KYABRAM
- KYNETON
- LEONGATHA
- MAFFRA
- MANSFIELD
- MARYBOROUGH
- MILDURA
- MINYIP
- MOE
- MORTLAKE
- MURRAYVILLE
- NATHALIA
- NHILL
- NULLAWIL
- ORBOST
- PORTLAND
- QUAMBATOOK
- RAINBOW
- ROCHESTER
- RUTHERGLEN
- SALE
- SEA LAKE
- SEYMOUR
- SHEPPARTON
- ST. ARNAUD
- STAWELL
- SWAN HILL
- TALLANGATTA
- TIMBOON
- TRARALGON
- UNDERBOOL
- WANGARATTA
- WARBURTON
- WARRACKNABEAL
- WARRAGUL
- WARRNAMBOOL
- WODONGA
- WONTHAGGI
- YARRAM
- YARRAWONGA

## TASMANIA

HOBART
**Motors Pty. Ltd.,**
179 Macquarie Street

BURNIE
**Motors Pty. Ltd.,**
84-89 Marine Terrace

DEVONPORT
**Motors Pty. Ltd.,**
628 Victoria Parade

KING ISLAND
**Island Motors Pty. Ltd.,**
Netherby Road, Currie

LAUNCESTON
**Motors Pty. Ltd.,**
93 Elizabeth Street

SMITHTON
**Motors Pty. Ltd.,**
16 Nelson Road

ULVERSTONE
**Motors Pty. Ltd.,**
99 Reibey Street

## Metropolitan

ALBION
**Bill Harrison Car Sales**
Frodsham Street & Crosby Road

ASPLEY
**Zupps (Aspley) Pty. Ltd.,**
1442 Gympie Road

CLEVELAND
**Russell Smith Holden**
Cnr. Queen & Doig Streets

IPSWICH
**Zupps Holden**
246 Brisbane Road, Booval

MOOROOKA
**John Sivyer Holden**
1060 Ipswich Road

MT. GRAVATT
**Zupps Motors Pty. Ltd.,**
1310 Logan Road

NEWSTEAD
**Eagers Retail Pty. Ltd.,**
95 Breakfast Creek Road

NUNDAH
**Eagers (Northside)**
1319 Sandgate Road

PETRIE
**North Pine Motors Pty. Ltd.,**
Gympie Road

REDCLIFFE
**Village Holden**
425 Elizabeth Street

SPRINGWOOD
**Motorama Holden**
Pacific Highway & Brennan Street

WINDSOR
**Leach Holden**
143 Newmarket Road

WYNNUM
**Doug Barton Holden**
200 Tingal Road

## Country

Consult your local Yellow Pages under Motor Cars — New for Addresses and Telephone Numbers.

- ATHERTON
- AUGATHELLA
- AYR
- BEAUDESERT
- BEERWAH
- BILOELA
- BOWEN
- BUNDABERG
- CABOOLTURE
- CAIRNS
- CALOUNDRA
- CHARLEVILLE
- CHARTERS TOWERS
- CLERMONT
- CLONCURRY
- CROWS NEST
- CUNNAMULLA
- DALBY
- EMERALD
- GATTON
- GAYNDAH
- GLADSTONE
- GOONDIWINDI
- GYMPIE
- HUGHENDEN
- INGHAM
- INNISFAIL
- JULIA CREEK
- KILCOY
- KINGAROY
- LAIDLEY
- LONGREACH
- MACKAY
- MAREEBA
- MARYBOROUGH
- MITCHELL
- MONTO
- MORANBAH
- MOURA
- MT. ISA
- MURGON
- NAMBOUR
- NANANGO
- NOOSA HEADS
- PROSERPINE
- QUILPIE
- ROCKHAMPTON
- ROMA
- SOUTHPORT
- SPRINGSURE
- STANTHORPE
- ST. GEORGE
- TOOWOOMBA
- TOWNSVILLE
- TULLY
- WARWICK
- WINTON
- YULEBA

## Metropolitan

BELMONT
**Major Motors**
225 Great Eastern Highway

CANNINGTON
**Brian Gardner Holden**
1308 Albany Highway

FREMANTLE
**Shacks Holden**
64 Queen Victoria Street

GOSNELLS
**Lance Gibbons Holden**
2325 Albany Highway

MANDURAH
**Estuary Holden**
1 Gibson Street

MELVILLE
**Melville Motors Pty. Ltd.,**
532-536 Canning Highway

MIDLAND
**John Goldie Holden**
161 Great Eastern Highway

MORLEY
**Metro Motors Pty. Ltd.,**
212 Walter Road

NAVAL BASE
**Shacks Cockburn**
15 Rockingham Road

OSBORNE PARK
**North City Holden**
Cnr. Scarborough Beach Road
& Harborne Street

PERTY
**City Motors**
505 Newcastle Street

VICTORIA PARK
**Young's Holden**
529 Albany Highway

WANNEROO
**Phoenix Holden**
316 Berriman Drive

## Country

Consult your local Yellow Pages under Motor Cars — New for Addresses and Telephone Numbers.

- ALBANY
- BEVERLEY
- BOYUP BROOK
- BRIDGETOWN
- BROOKTON
- BRUCE ROCK
- BUNBURY
- BUSSELTON
- CARNAMAH
- CARNARVON
- COLLIE
- CORRIGIN
- CRANBROOK
- DALWALLINU
- ESPERANCE
- GERALDTON
- GNOWANGERUP
- GOOMALLING
- KALGOORLIE
- KARRATHA
- KATANNING
- KELLENBERRIN
- KOJONUP
- KUNUNURRA
- MANJIMUP
- MERREDIN
- MOORA
- MORAWA
- MT. BARKER
- NAREMBEEN
- NARROGIN
- NORTHAM
- PINJARRA
- PORT HEDLAND
- QUAIRADING
- WAGIN
- WILLIAMS
- WYALKATCHEM

## S.A. Metropolitan

ADELAIDE
**City Holden**
203-221 Grenfell Street

ADELAIDE
**United Motors Retail Ltd.,**
72 Franklin Street

ELIZABETH
**Peter Page Holden**
Elizabeth Way

GLENELG
**John H. Ellers Pty. Ltd.,**
282 Brighton Road

MALVERN
**Claridge Motors Pty. Ltd.,**
361-367 Unley Road

MILE END
**United Motors Co. Pty. Ltd.,**
71 West Beach Road

PORT ADELAIDE
**Smith Motor Co. Pty. Ltd.,**
171 Commercial Road

REYNALLA
**Brian Gill Holden**
49-59 Main South Road

VALLEY VIEW
**Plaza Holden**
817-839 North East Road

## S.A. Country

Consult your local Yellow Pages under Motor Cars — New for Addresses and Telephone Numbers.

- BALAKLAVA
- BERRI
- BURRA
- CEDUNA
- CLARE
- CLEVE
- CRYSTAL BROOK
- CUMMINS
- GAWLER
- JAMESTOWN
- KADINA
- KEITH
- KINGSCOTE
- KINGSTON
- LAMEROO
- LOXTON
- MAITLAND
- MALLALA
- MENINGIE
- MILLICENT
- MT. BARKER
- MT. GAMBIER
- MURRAY BRIDGE
- NARRACOORTE
- PORT AUGUSTA
- PORT LONCOLN
- PORT PIRIE
- RENMARK
- STRATHALBYN
- TANUNDA
- TUMBY BAY
- VICTOR HARBOUR
- WAIKERIE
- WHYALLA
- WUDINNA
- YANKALILLA
- YORKETOWN

## N.T.

ALICE SPRINGS
**Kittle Bros (Alice Springs) Pty. Ltd.,**
Cnr. Wills Terrace & Railway Terrace

DARWIN
**Suttons Motors (Darwin) Pty. Ltd.,**
21-25 Stuart Highway

# Weekly Checks

As well as taking your car to be serviced (refer Chapter 10) there are a few inspections that the owner (or nominee) is required to make. These checks are simple once you know how, and are necessary to keep your car in good, safe, working order.

Page
6-1 — Raising and Securing the Bonnet
6-1 — Location for Checks
6-2 — **ENGINE OIL** level check
6-4 — **ENGINE COOLANT** level check
6-6 — **AUTOMATIC TRANSAXLE** fluid level check
6-7 — **BATTERY** fluid level check
6-8 — Topping up the **WASHER** fluids
6-9 — **BRAKE** fluid level check
6-10 — **POWER STEERING** fluid level check
6-11 — **TYRE AIR PRESSURE** check
6-14 — **BULB** Replacement
6-18 — Miscellaneous Checks

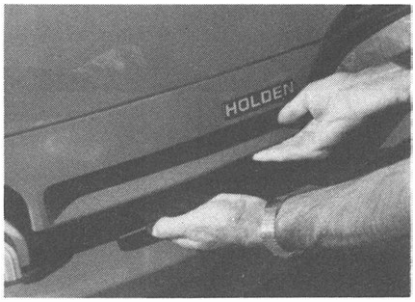
**CAUTION:** Avoid inhaling exhaust gases because they contain carbon monoxide, which is a dangerous gas that can cause unconsciousness and is potentially lethal.

**DO NOT RUN THE ENGINE IN AN ENCLOSED AREA SUCH AS THE GARAGE ANY LONGER THAN IS NEEDED TO MOVE THE VEHICLE.**

**DO NOT SIT IN A PARKED VEHICLE FOR ANY EXTENDED PERIOD OF TIME WITH THE ENGINE RUNNING.**

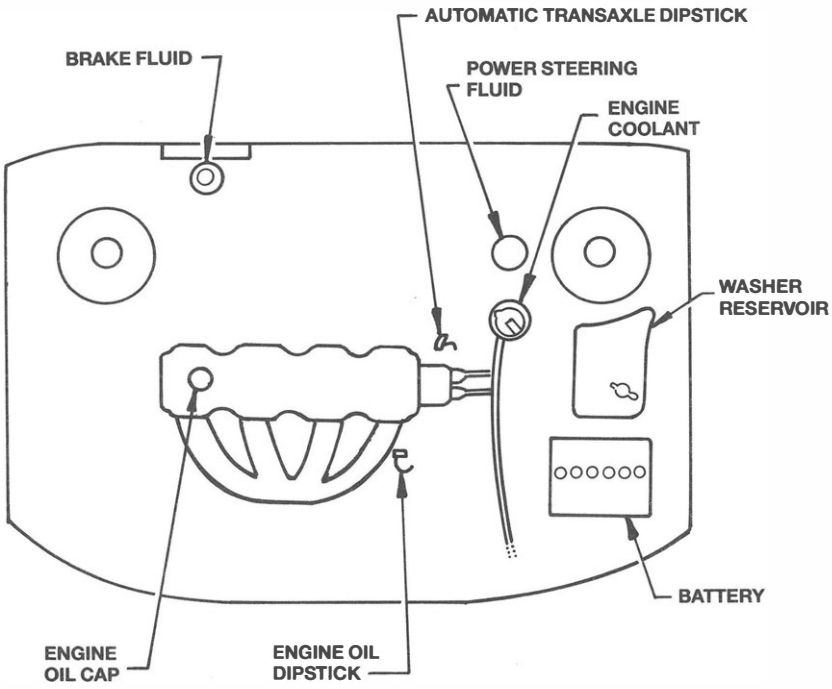
If at any time you think exhaust fumes are entering the car, have the cause determined and corrected as soon as possible.

## Engine Hood Lock and Catch




To open the engine hood, pull hood lock release located beneath the instrument panel, to the right of the steering column. This allows the hood to release but is prevented from opening by the safety catch. To open completely, reach in between the bumper and hood and move safety catch to the right. Hold in this position, raise hood and support by inserting support rod into the provided slot. For closing return support rod to its resting position and lower hood gradually to be finally dropped under its own weight.

Always check to make certain hood is properly secured. If necessary, check that release handle below the instrument panel is pushed-in to its normal position.

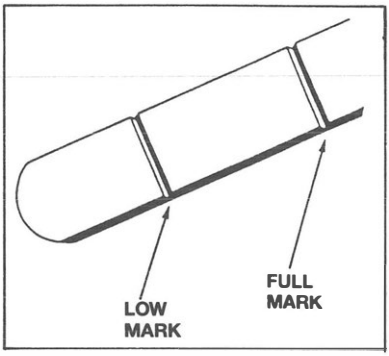


It is the owner's responsibility to check the oil level at regular intervals. The best time to check the engine oil level is when the oil is warm, such as during a refuelling stop.

To check the engine oil level accurately, the car must first be on level ground. After stopping the engine, wait a few minutes for the oil to drain back to the oil pan.

The level is checked from the 'dipstick'. Refer to the diagram on page 6-1 for location.

Remove the dipstick and wipe it clean with clean cloth or paper. Insert the dipstick firmly all the way down, pause for a second then withdraw the dipstick and look at the oil level on it. The oil level should be maintained between the two marks, neither going above the FULL mark nor under the LOW mark. Remember to reinsert the dipstick firmly after taking the reading.




The distance between LOW and FULL marks represents approximately 0.75 litres of oil.

If you need to add oil, use SF grade engine oil 20W/40 (or 20W/50 in high temperature areas).

To add oil, turn the oil cap (refer page 6-1 for location) anticlockwise and remove. Pour the required oil into the opening. Wait a few minutes for the oil to drainback into the oil pan. Then check the oil level with the dipstick again. If still too low, add more oil, if now correct, screw the cap back on tightly and replace the dipstick. If you check the oil level when the oil is cold do not run the engine first. The cold oil will not drain back into the oil pan fast enough to give a true oil level reading.

## Some Notes on Oil Consumption

Every internal combustion engine uses a certain amount of oil, especially during the running-in period. Your engine is dependant on oil to lubricate the cylinder walls, pistons, rings and valve stems. A thin film of oil is left on the cylinder walls, some of which is carried into the combustion chamber and burnt during the combustion process. This also applies to the film of oil on the valve stems which is drawn into the combustion chamber and burnt.

There are several other factors that contribute to the rate of oil consumption in your engine, apart from mechanical malfunctions such as worn pistons, rings, valve stems and guides. These factors are: the way in which the vehicle is operated, the quality and grade of oil, the oil level, and dilution of the oil.

- **Operation of the Vehicle**
  Sustained high engine speeds will increase oil consumption because higher speeds increase engine temperature which lowers oil viscosity thus allowing more oil to reach the combustion chamber. Towing a heavy load will also result in increased oil consumption due to increased engine temperature and hence lower oil viscosity.

  It is recommended that heavy load towing be done only after the vehicle has been 'run-in'.

- **Quality and Grade of Oil**
  Oil viscosity is a significant factor in oil consumption, therefore if you use an oil which is too "thin" (low viscosity) your oil consumption will increase.

- **Oil Level**
  Maintaining a proper oil level is also an important factor in controlling oil consumption. An overfull crankcase allows the reciprocating parts of an engine to splash oil onto the cylinder walls in quantities greater than the piston rings can control. This excess oil will be drawn into the combustion chamber and burnt. Refer to 'Checking Oil Level' for maintaining correct levels.

- **Dilution**
  Probably the most prevalent complaint of oil consumption comes from the motorist whose vehicle is frequently driven at below normal operating temperatures. The oil becomes diluted by fuel and moisture which settles in the oil pan and may even raise the oil level creating a false reading on the oil level dipstick. For example, in a vehicle that has accumulated 1,500 kilometres of short distance or intermittent city operating and has consumed a normal amount of oil, the level may not have dropped from the "Full" mark, due to dilution. If this vehicle is driven for some distance at highway speeds on a warm day, the dilution elements evaporate, lowering the oil level and the motorist assumes the oil "lost" has been consumed in the highway operation.

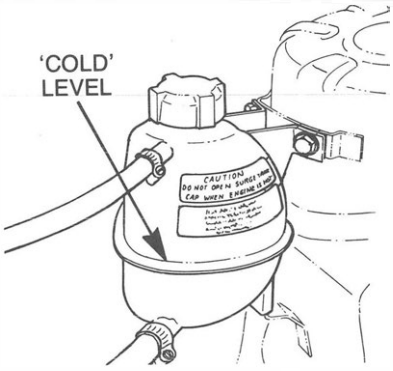
  After taking into account the above factors, if you are still concerned that your engine has excessive oil consumption then you should discuss the situation with a GM-H Dealer. Remember that an engine's oil consumption should not be judged until it has run at least 7,000 kilometres.

**CAUTION: Corrosion inhibitors and anti-freeze fluids are poisonous. Use extreme care when handling these materials, particularly when draining your vehicle's cooling system. If swallowed seek medical attention.**
**CAUTION: Do not remove the radiator cap when the engine and radiator are hot. Scalding fluid and steam can be blown out under pressure if the cap is removed from a hot radiator.**

There should be very little loss of coolant if the system is operating normally. However, the level should be checked weekly when the engine is COLD. This is simply a matter of looking at the level in the plastic container, called the surge tank. Refer to the page 6-1 for location. When the engine is cold, the level should be at, or slightly above, the 'COLD' mark on the tank.

If the surge tank needs topping up, use water and corrosion inhibitor as specified below. If anti-freeze is already in your car's cooling system then add water and anti-freeze.

Note: If fluid often needs to be added, you should see your GM-H Dealer for a cooling system check.




Refer page 4B-7
if engine overheats.

**NOTE:**
- If when checking the coolant level, the surge tank is observed to be completely empty, follow the refilling procedure described in the following page to expel any air which may be trapped in the cooling system.

## Corrosion Inhibitors

To protect the cooling system from corrosion, your car was filled with coolant containing corrosion inhibitor meeting Holden's specification HN1109. Unless anti-freeze has been added, all future fluid additions should be made with a pre-mixed coolant comprising clean water and corrosion inhibitor meeting this specification. Use 3% inhibitor to water. NOTE: Corrosion inhibitor performance cannot be guaranteed unless the correct concentration is used.

## Water

If you live in an area where the water has a high mineral or chemical content, use rain water or distilled water (mixed with either the specified anti-freeze or inhibitor). If you need to use bore water in an emergency, change it for the correct coolant as soon as possible.

## Anti-Freeze

If your vehicle is to be parked overnight or operated for any length of time in regions where temperatures of 0°C or below are encountered the use of a suitable brand of anti-freeze fluid is essential.

The recommended anti-freeze fluid is permanent type (ethylene/glycol) meeting GM specification 1899-M. Follow carefully the anti-freeze manufacturer's instructions when adding anti-freeze to the cooling system.

For protection down to −16°C and also to provide adequate corrosion resistance, use a mixture of not less than 35% (by volume) anti-freeze and 65% (by volume) of clean water.

Anti-freeze also contains a corrosion inhibitor therefore it is not necessary to add a separate inhibitor.

**NOTE:** Do not mix different types of anti-freeze or corrosion inhibitors as they may be incompatible. If a different type has been used in the cooling system flush the sytem with clean water before refilling with coolant containing the recommended corrosion inhibitor or anti-freeze fluid.

If your vehicle's coolant system does not contain anti-freeze then the radiator and cylinder block must be drained before parking in freezing conditions. Failure to do so could result in bursting the radiator and/or cracking the cylinder block if the coolant freezes.

**NOTE:** Draining of the engine radiator and cylinder block will not drain coolant out of the heater core unless the heater contol lever is in the full 'HOT' position when draining the cooling system.

## Coolant Replacement

**CAUTION:**
**ELECTRIC COOLING FAN — Your vehicle is fitted with a temperature controlled electric radiator cooling fan as standard equipment. Therefore, when working around the engine compartment with the engine running or ignition ON, keep clear of the fan as it may start operating without warning.**

To maintain the cooling system in good condition it is recommended that every 12 months or 20,000 km the coolant be replaced. This will ensure that the accumulation of scale and corrosion products is kept to a minimum thereby keeping the cooling system clean and operating efficiently.

Drain, flush and refill the cooling system as follows:—

1. When the engine and radiator are cool, loosen the surge tank cap.
2. To drain the coolant, disconnect the lower radiator hose from the radiator. (Refer to previous CAUTION regarding poisonous nature of coolant additives.)
3. When draining is completed, reconnect the lower radiator hose and refill with coolant according to the following procedure.
4. REFILLING: Add premixed coolant comprising clean water and corrosion inhibitor or anti-freeze fluid (refer specifications and concentrations given earlier in this section) filling to the 'COLD' mark on the surge tank.

   To release any air trapped in the system, remove the temperature gauge sender unit from the thermostat housing whilst filling. When coolant flows from the thermostat housing, replace the sender unit, ensuring that the thread is sealed with a suitable sealant.

   If the sender cannot be removed, the system must be filled slowly till the surge bottle is filled. Wait at least five minutes, before topping up with coolant, to allow any trapped air to escape.

   Move the heater temperature control lever to 'HOT' (to allow coolant to flow through heater core) and then start the engine. Allow the engine to warm up to operating temperature and then top up the coolant level in the surge tank as required.

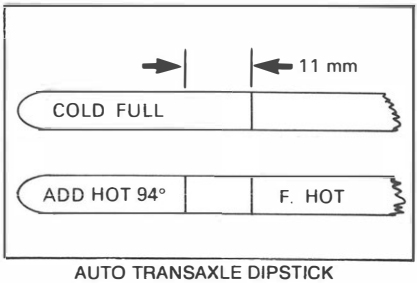
   **NOTICE: To avoid engine overheating, the above refilling procedure must be followed so that any trapped air is expelled from the cooling system.**

The level of fluid in the automatic transaxle should be checked weekly, by looking at the fluid level on the dipstick. Refer to the diagram on page 6-1 for location. Dirt in the transaxle can cause breakdowns, so be careful when checking or adding fluid.

## Fluid Level — Cold Check

The procedure for checking a cold transaxle is as follows:

1. Vehicle to be parked on level surface.
2. Apply the parking brake and place the shift lever in PARK. DO NOT MOVE THROUGH RANGES.
3. Start the engine.
4. Check the fluid level. This check must be performed after the engine has been allowed to idle for one minute and not longer than two minutes. To check the level, withdraw the dipstick, wipe it clean, insert it as far as it will go and then remove it. The correct level is between the mark and 11 mm below the mark on the side of the dipstick marked "COLD FULL". If the level is below this range add 0.25 to 0.50 litres.



AUTO TRANSAXLE DIPSTICK

If adding fluid, use only *DEXRON 11 AUTOMATIC TRANSMISSION FLUID. Add the fluid in the same opening as the dipstick is stored in, and wait 1 minute for the oil to settle. Again check the level with the dipstick and add further oil if necessary. Remember to always replace the dipstick.

## Fluid Level — Hot Check

To check the fluid level when the transaxle is warmed up to normal operating temperature the following procedure should be used.

1. Park vehicle on level surface and leave engine idling.
2. Appiy the parking brake and piace the shift lever in PARK.
3. To check the level, withdraw the dipstick, wipe it clean, reinsert it as far as it will go and then remove it. The correct level is between the two marks on the side of the dipstick marked 'ADD HOT 94°'. THe topping-up quantity between these two marks is 0.5 litre.

   If adding fluid, use only *DEXRON 11 AUTOMATIC TRANSMISSION FLUID. Add the fluid in the same opening as the dipstick is stored in, and wait 1 minute for the oil to settle. Again check the level with the dipstick and add further oil if necessary. Remember to always replace the dipstick.

   NOTE: If fluid has to be added often, there may be a problem or leak — and you should see your GM-H Dealer.

*DEXRON 11 is a registered trademark of General Motors Corporation.

Care of your battery is very simple but extremely important. The battery installed will either be the type that requires topping up, or will be of the maintenance-free type. the maintenance-free battery is completely sealed except for very small vent holes in its top. It has no filler caps and NEVER needs to be topped up.

However, if the battery installed has removable vent caps, then the fluid level of the battery must be regularly checked. If the car is operated in hot temperatures or at constant, high speed the battery fluid level should be checked at least twice between the 6 month dealer service, when the fluid level will be checked for you.

**CAUTION:**
**Batteries emit an explosive gas mixture which may be ignited by sparks or naked flames. You should therefore keep sparks and flames away from the battery at all times and never smoke near a battery.**

**Batteries contain sulphuric acid. If acid contacts skin or clothing, flush immediately with lots of water. In case of eye contact, flush with lots of water and contact a doctor immediately.**

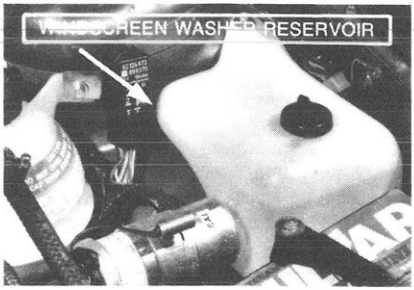
**Take care with all metal objects and tools including items you may wear (e.g. jewellery, rings and metal watchbands) near battery terminals. Metal objects that touch battery terminals can cause sparks and serious heat burns to the user or wearer.**

When checking the battery level, make sure the engine is not running. Remove the caps with your fingers — there will be 6 filler holes revealed.

Each cell must be individually checked. Use distilled water, as required to keep the level of the battery fluid between the bottom of the vent tube and 5 mm below it. **Do not overfill.** Replace the caps securely.

Refer to page 4-9 for emergency starting when battery is flat.

## Windscreen Washer Fluid




The washer fluid is constantly used, so the level should be checked weekly and topped up as required.

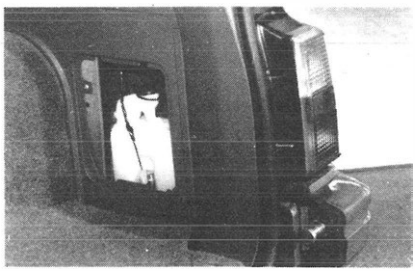
The washer's plastic container is in the engine compartment, behind the battery, refer page 6-1 for exact location.

Maintain the fluid at the level indicated on the container.

For a crystal clear windscreen, the correct amount of Optikleen Washer Solvent (part no. M37933) can be added. Do not use ordinary soap or detergent as these not only froth up but will also damage the wiper rubbers.

After adding fluid, make sure the cap is secured.

## Tailgate Washer Fluid (wagon only)

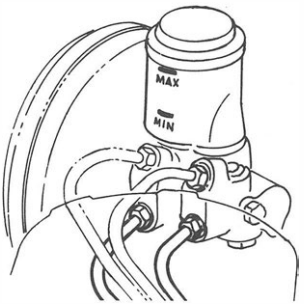


The plastic container for wagon tailgate washer fluid is behind a removable panel in the rear compartment area, on the driver's side of the car.

Check and add, as above.

NOTE: The washers should not be used if the fluid container is empty.

The fluid level in the master cylinder should be checked regularly in conjunction with checking the oil and coolant levels. The fluid level visible through the 'see through' reservoir should be maintained between the MIN and MAX level markings. If the fluid is between those levels **do not** remove the master cylinder cap. Remember that brake fluid exposed to the atmosphere will quickly absorb moisture which in turn lowers the performance of the fluid as well as increasing risk of corrosion of brake components.




If the fluid level drops to 'MIN' or below, then you should top up to the 'MAX' mark with new brake fluid of the heavy duty type, meeting Holden's specification no. HN 1796. Holden's part no. 92026651)

**NOTICE: Use only new brake fluid. Use of an old, used or inferior brake fluid may endanger the functioning of the brake system.**

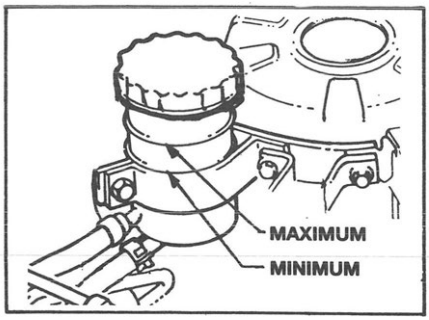
If the master cylinder requires regular topping up it indicates that there could be a malfunction within the brake hydraulic system in which case it should immediately be brought to the attention of your GMH Dealer. A gradual drop in fluid level usually occurs over a long period as the brake pads and linings wear out. This is normal.

This can be checked by simply looking at power steering fluid container, refer page 6-1 for location.

The level should be checked after the vehicle has been driven for a while, so that the fluid is warm. A convenient time to do this is when stopping for petrol.

The level should be between the minimum and maximum indicators on the outside of the reservoir.

If fluid is at or below the minimum mark, fluid should be added. Unscrew the cap and add Dexron 11 Automatic Transmission Fluid. Do not fill over the maximum level and remember to replace the cap tightly. If you often need to add fluid, you should see your GM-H dealer to have the system checked out.

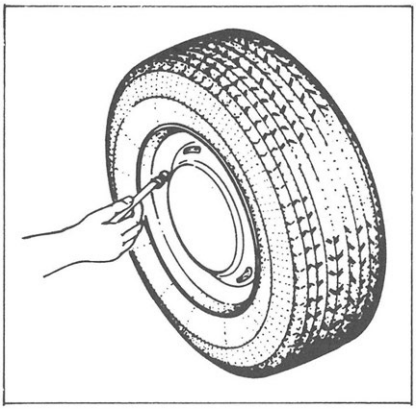


Checking the air pressure of your tyres (including the spare) ensures your SAFETY, as well as reducing fuel consumption and increasing the life of your tyres.

Make sure your car will handle at its best — CHECK THE PRESSURES WEEKLY. For constant long distance of rough road travelling, daily checking is recommended.

Refer to the tyre placard inside the glove box for the correct pressure for your tyres.

Tyre inflation pressure increases when the tyres have been driven more than 2 km. The pressure should be checked when the TYRES ARE COLD (stationary for over 3 hours). If they must be checked when warm/hot, allow pressure to read 10% above that recommended.



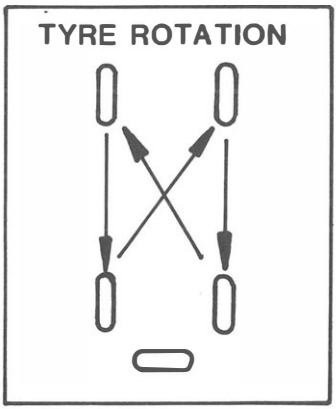
Always use a TYRE PRESSURE GAUGE to check the tyres — simply looking at the tyres is not sufficient.

Remember to put back any valve DUST CAPS or EXTENSIONS if so equipped. This stops dirt and moisture from fouling the valves.

## Tyre Inspection and Rotation

Front and rear tyres perform different jobs and can wear differently depending on the types of roads driven, your driving habits, wheel alignment and balance, tyre pressures etc.

Your GM-H Dealer will be able to diagnose any unusual signs of wear and can also balance the wheels and tyres for you. If the tyres are rotated, it is recommended that the balance be checked at the same time.



## Tyre Replacement and Repair

**CAUTION: Do not mix different tyre construction types, such as radial and cross ply, on your vehicle except in emergencies, because your car's handling could be affected and may result in loss of control.**

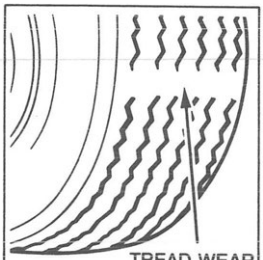
When replacing tyres you should use the same size, load rating and construction type as the original tyres on your car. Refer to tyre placard inside glove box for tyre size and load rating. Using a different size or type of tyre may affect such things as ride, handling, speedometer/ odometer calibration, vehicle ground clearance and tyre or tyre chain clearance to the body or chassis.

Tyres with a higher speed rating and/or with a maximum load rating in excess of that listed on the tyre placard for tyre size listed are also acceptable as replacements provided they are fitted to a suitable rim size.

New tyres should be fitted in pairs to the front. If replacing only one tyre, it should be paired on the same axle with the least worn of the other three.

You should replace your tyres when:

1. The tyres are worn to the point where the tread indicators appear or the cord or fabric is showing. The original equipment tyres fitted to your vehicle incorporate built-in tread wear indicators which assist in determining when the tyres have worn to the point of needing replacement. (See illustration) in the interests of safety, replacement should not be delayed.
2. The tread or sidewall is cut, split, or cracked deep enough to expose the cord or fabric.
3. The tyre has a bump or bulge in it, indicating some kind of internal damage.
4. The tyre has a puncture, cut or other damage which can't be repaired because of the size or location of the damage.


TREAD WEAR INDICATOR

If in doubt about the extent of damage to the tyre have it removed from the wheel and examined by a tyre specialist.

If a pressure loss occurs while driving, do not attempt to drive on the deflated tyre more than is necessary to stop safely. Driving even a short distance on a deflated tyre can damage it and the wheel beyond repair.

When an object which has punctured the tyre is removed, repairs are to be made in accordance with the tyre manufacturer's recommendations.

**CAUTION: Tyres which have been repaired or retreaded will not be able to be operated safely at high speeds therefore use is not recommended.**

## Alignment and Balance

Improper wheel alignment can cause the tyres to wear faster and to wear unevenly. It can also cause the car to 'pull' to the left or right.

Out-of-balance wheels and tyres can cause annoying vibration and uneven tyre wear such as cupping and flat spots.

If you have any reason to suspect that either of the above problems exists then have a wheel alignment and balance check done by your GM-H Dealer.

## Wheel Replacement

When replacing wheels for any reason, ensure that the new wheels are equivalent in diameter, rim width, offset and mounting configuration to those originally installed in your car.

**NOTE:** Replacing your factory fitted wheels and tyres with non specified wheels and tyres may void your new vehicle warranty as well as your motor vehicle insurance policy.

## Tyre Traction

**CAUTION: A decrease in driving, cornering and braking traction occurs when water, snow, ice, gravel or other material is on the road surface. Driving practices and vehicle speed should be adjusted to the road conditions.**

When driving on wet or slushy roads, it is possible for a wedge of water to build up between the tyre and road surface. This phenomenon, known as hydro-planing, may cause partial or complete loss of traction, which adversely affects vehicle control and stopping ability. To reduce the possibility of traction loss, the following precautions should be observed.

1. Reduce speed levels during rainstorms or when roads are slushy and if the road has standing water or puddles.
2. Replace tyres when tread wear indicators are visible.
3. Check that tyres are properly inflated.

## Heavy Treads

Caution must be exercised when using tyres with heavy treads, including tyres designed to gain traction in bad weather conditions. At sustained high speeds, this type of tyre will run at higher temperatures than standard tyres and consequently should only be operated within the limits recommended by the manufacturer.

Any doubts concerning the fitness of the tyres on your vehicle for the purpose you require should be referred to your GM-H Dealer, who will be pleased to advise.

Refer page 9-3 for specifications on replacement bulbs.

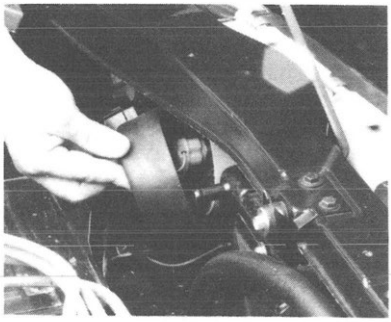
## Headlights

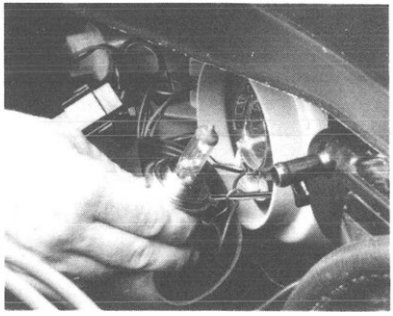
Access to headlight bulbs for replacement purposes is from within the engine compartment.

When servicing headlights do not touch bulbs or reflectors with bare hands. Greasy fingers will cause stains which evaporate — eventually resulting in a dull reflector. Grease spots and even finger marks on halogen-bulbs will lead to bulb failure within a short time.

Inadvertently stained bulbs may be cleaned with tissue paper, or a clean non-fuzzy cloth, using alcohol or white spirits.

## Headlight High/Low Beam

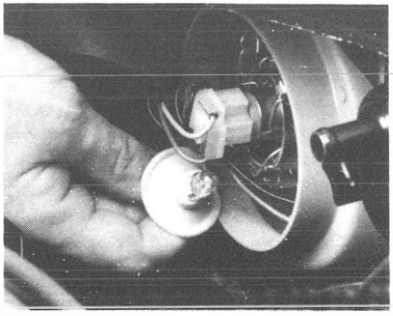




1. Remove protective rubber cover from rear of headlight.
2. Remove wiring connector from the back of the bulb.
3. Release spring clip which retains bulb in housing and withdraw bulb.
4. Insert new bulb so that the lugs on the bulb engage in the recesses in the bulb housing. Do not touch the glass of the new bulb as this drastically reduces bulb life.
5. Proceed in reverse sequence to removal.
6. Re-aim headlights (headlight aim varies from bulb to bulb). Detailed procedures for headlight aiming are given in the relevant service manual for your car.

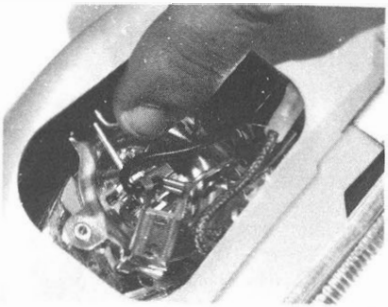
   However, because headlight aiming is a safety item it is recommended that you have it done by your GM-H Dealer.

## Parking Light

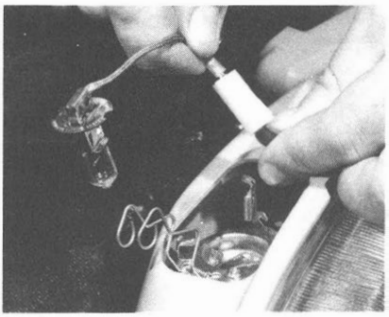


1. Remove protective rubber cover from rear of headlight.
2. Remove parking light bulb holder (located adjacent to headlight bulb) by pulling straight out of housing.
3. Remove parking light bulb by pulling straight out of holder.
4. Insert new bulb and proceed in reverse sequence to removal.

## Headlight Driving, Inboard



1. Remove rubber cover located in top of headlight housing.
2. Release spring clip which retains bulb in housing.
3. Withdraw bulb and disconnect electrical connector.
4. Insert new bulb, reconnect electrical connector and proceed in reverse sequence to removal. Ensure that the rubber cover is replaced correctly to avoid water/dust entry into headlight.



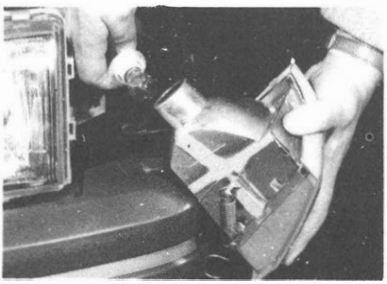
## Front Turn Signal Light

The bulb in this lamp can be replaced with the turn signal lamp assembly in its normal position (Method A) or detached from the headlight assembly (Method B).

**Method A**

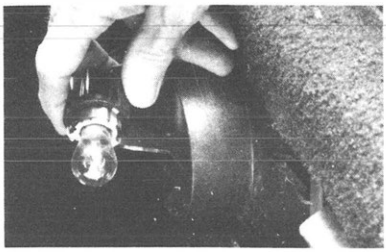
1. Remove the bulb socket from rear of lamp housing by twisting the socket anticlockwise.
2. Lightly depress bulb and remove by twisting and then pulling out of socket.
3. Insert new bulb and reassemble in reverse sequence to removal.

**Method B**



1. Release the turn signal lamp retaining spring which clips onto the rear of the headlight.
2. The turn signal lamp can now be detached from the headlight for easy access to the bulb socket.
3. Proceed as for Method A.

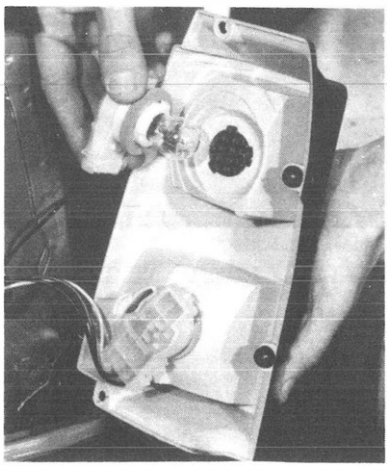
## Rear Turn Signals, Stop and Tail Lights, Back-Up Lights — Sedan



1. To gain access to rear lamp assembly bulb, twist relevant bulb socket anti-clockwise and remove bulb socket from rear of lamp assembly. The bulb sequence is:
   Outboard —Turn signal
   Centre — Tail and stop
   Inboard — Reverse.
2. Replace bulb in socket.
3. The bulb socket is reinstalled by twisting to the right.

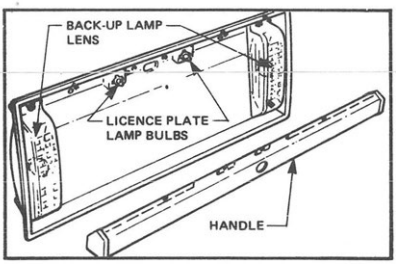
**NOTE:** To gain access to the rear lamp assembly on SL/E models the rear compartment moulded carpet has to be pulled back.

## Rear Turn Signals, Stop and Tail Lights — Wagon



1. Remove four screws securing lamp to body and pull lamp out slightly.
2. Depress locking lever and remove relevant twist lock bulb socket from rear of lamp assembly by turning in the direction of the 'Remove' arrow.
3. Replace bulb.
4. Insert socket into lamp housing and turn in direction of 'Install' arrow until audible click is heard.
5. Reinstall lamp assembly.

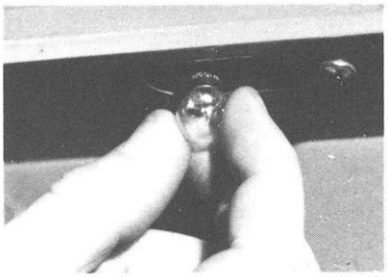
## Back-up Lamp — Wagon




1. Remove tailgate handle.
2. Remove relevant lens taking care not to damage seal.
3. Replace bulb taking care not to touch reflective silver paint finish on lamp base.
4. Reinstall lens.
5. Reinstall tailgate handle.

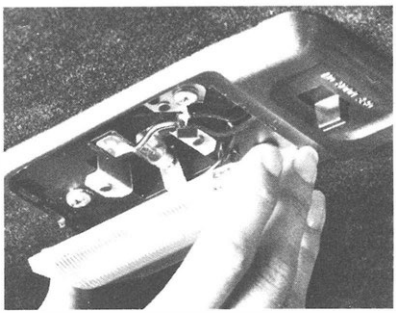
## Licence Plate Light — Wagon

1. Remove tailgate handle.
2. Pull bulb(s) out of socket and replace with new bulb(s).
3. Reinstall tailgate handle.



## Licence Plate Light — Sedan

1. Remove bulb by turning anticlockwise and then pulling out of socket.
2. Insert new bulb, depress and turn clockwise.



## Interior Light

1. Carefully prise off the light cover using a screwdriver.
2. Lightly press bulb in the direction of the spring clip and remove.
3. Install new bulb.
4. Replace light cover.

## Instrument Panel and Console Lamps

Replacement of these bulbs is recommended to be done only by a GM-H Dealer or another competent person as all wiring and associated attachments are prone to damage if not serviced correctly.

When carrying out the checks already described inspect the engine for oil leaks. If leaks are evident you should consult your GM-H Dealer.

The following checks should be regularly done to ensure proper safety and dependability of your car.

**CHECK:**

— that all exterior lights are working and that their appropriate interior indicators light up when in operation.

— Mirrors and glass are clean and not scratched.

— automatic transaxle T-bar — make sure that the indicator correctly lines up next to the gear selected.

— the aim of water on screen and condition of wipers.

— demister operates.

— horn works.

— all seat belt condition and operation (give it a sharp tug to make sure that it will 'lock' if necessary) and check that buckles are clean and operating correctly. Remember that seat belts must never be worn twisted.

Holden's Motor Company also publishes various service manuals which are available from your Dealer or from: —

Stan H. Earle,
46 Isabella Street,
Moorabbin, Vic., 3189.
Phone No.: (03) 555 6555

# Chapter 7
# Towing

Page

7-1 — Loading your Car

7-3 — Essential Towing Equipment

7-3 — Weight Versus Speed

7-4 — Towbar Ball Load

7-5 — Towing Precautions

Refer page 4-3 if towing your car from another vehicle.

**Overloading is a safety hazard and could also shorten the life of your car or its parts.**

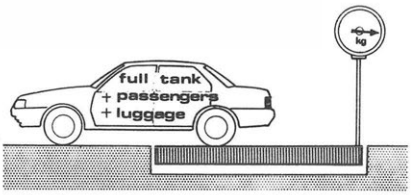
The maximum load (as defined by Australian Design rules) your car is designed to carry safely is as follows:

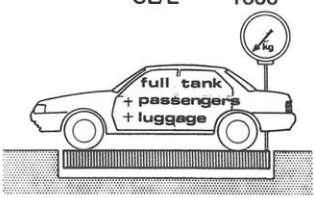
| | Sedan | Wagon |
|---|---|---|
| One person (average 68 kg in weight) in each seating position (5) | 340 kg | 340 kg |
| Plus luggage carried in load compartment | 68 kg | 91 kg |
| Maximum Load — Total | 408 kg | 431 kg |

**NOTICE: Your Camira was designed and developed as a passenger car and not as a commercial goods carrying vehicle, therefore, continuous operation at maximum load is not recommended.**

If you load your car other than to the above table then you should ensure that the **Maximum Rear Axle Load** and **Maximum Vehicle Load** specified for your model are not exceeded.

| Maximum Rear Axle Load (kg) | | | Maximum Vehicle Load (kg) | | |
|---|---|---|---|---|---|
| Sedan | SL | 746 | Sedan | SL | 1495 |
| | SL/X | | | SL/X | 1521 |
| | SL/E | | | SL/E | 1541 |
| Wagon | SL | 817 | Wagon | SL | 1567 |
| | SL/X | | | SL/X | 1595 |
| | SL/E | | | SL/E | 1606 |




The checking of both these loading limits will require weighing the car on a weighbridge or on scales designed for this purpose.

## Roof Rack Loads

No increase in maximum vehicle load is allowable where a roof rack is fitted. It must be understood that roof rack loads alter the handling characteristics of a vehicle due to a change in the centre of gravity. When carrying loads on the roof rack avoid abrupt swerving or sharp steering manoeuvres. The load should be evenly distributed. A load of no more than 50 kg is suggested as a reasonable limit.

## Booster Springs and Superlift Shock Absorbers

The use of booster springs or superlift shock absorbers DOES NOT increase the load capacity of the car. The recommended loading limits for your car must NOT be exceeded if overloading of axle components and the consequent shortening of service life is to be avoided.

Superlift shock absorbers do allow adjustment of the car's height, so that improved ride and handling and better ground clearance in rough terrain may be obtained when running heavily laden.

**CAUTION: Do not drive the car with Superlift shock absorbers inflated when the car is unladen as vehicle handling is affected. (The car should be at normal trim level.)**

## Tyre Load Rating and Vehicle Loading

It must be clearly understood that the maximum load rating shown on the tyre placard in the glove compartment is not an actual load capacity that can be used for each wheel. While the tyre manufacturers rate the tyre for this load application at the maximum pressure shown on the placard, the vehicle manufacturer's body and suspension components, ride, and handling characteristics must be taken into account. Therefore, the maximum rear axle loading and the maximum vehicle load should not be exceeded.

## "Add On" Equipment — Front of Car

Owners intending to fit additional equipment to the front of the car, such as 'bull bars' etc. should first check with their GM-H dealer.

Depending on the mass of the equipment, it may be necessary to fit heavier duty springs and struts to help avoid potential damage to the front underside of the car when driving in rough road conditions.

**NOTE:** Cars that have been fitted with the optional Country Pack will have these heavy duty front suspension components fitted as part of the package.

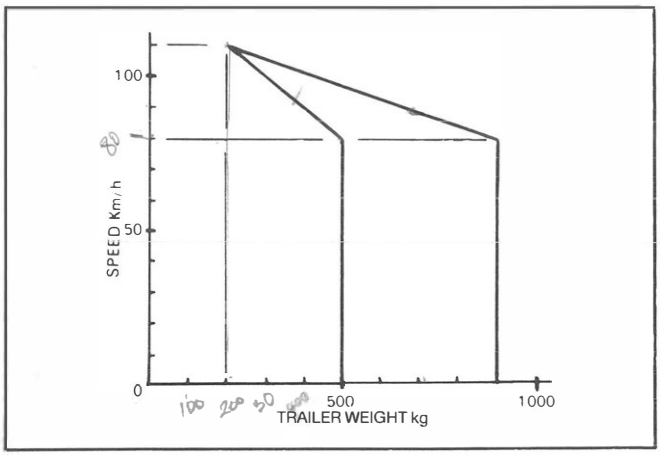
Your Camira is designed primarily as a passenger car, therefore handling, braking durability and economy will be affected by towing a caravan or trailer. Before attempting any towing, ensure that the correct equipment is fitted to your car. Your GM-H Dealer will help supply and install towing equipment to suit your requirements.

| Caravan or Trailer Weight | ESSENTIAL TOWING EQUIPMENT |
|---|---|
| Up to 500 kg | Holden's Parts & Accessories Trailer Wiring Harness Package.<br>Holden's Parts & Accessories Tow Bar Package (Sedan or Wagon) as required. |
| Up to 907 kg | Holden's Parts & Accessories Trailer Wiring Harness Package.<br>Holden's Parts & Accessories Tow Bar Package (Sedan or Wagon) as required.<br>Load Equalizer Hitch<br>Trailer Brakes — for optimum control, use driver controlled independently operated brakes. Over-run type brakes may not be suitable. |

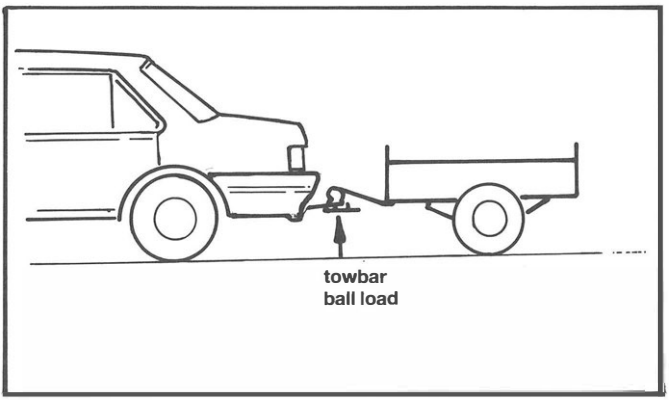
If the trailer uses electrical current from the tow vehicle other than for lights, stop lights and turn signals, specify heavy duty alternator and heavy duty battery.

**NOTE:** Holden's Parts & Accessories towing equipment is recommended where it is available. Where it is not available no recommendation is made as to the make of equipment which should be used. Where Holden's Motor Company will not accept liability for defects occurring in towing equipment not marketed by Holden's Parts & Accessories or for defects in the vehicle arising from the use of such equipment.

The following graph shows how the towed weight should be reduced for travel at higher speeds.



The towbar ball load (measured in kilograms) is the vertical force required to support the trailer or caravan coupling in the towing position.




This weight can be adjusted by correctly packing the contents of the trailer or caravan.

Ideally, the ball load should be 10% of the packed trailer or caravan weight but may be as high as the weight shown in the following table. If the ball load is too light or too heavy the steering and handling of the car will be greatly impaired.

| Caravan or Trailer Weight | Maximum Permissible Towbar Ball Load |
|---|---|
| Up to 500 kgs | 50 kg |
| Up to 907 kgs | 90 kg |

NOTE: If the ball load is more than 50 kg, a load equalizer hitch must be used.

When towing, the towbar ball load must be subtracted from both the maximum rear axle and maximum vehicle loadings, see page 7-1.

## Running-In Period

It is best to drive your new Camira for at least 1500 kilometres before towing a load. The same applies if you have a new or reconditioned engine or transaxle.

## Maintenance — Automatic Transaxle

More frequent vehicle maintenance is required when using your car for towing. Where an automatic transaxle is fitted the transaxle fluid will need to be changed every 12 months or 20,000 kilometres.

## Safety Chain

The safety chain is designed to prevent accidents should the connection between car and trailer fail while towing. Be sure the chain is slack enough to permit turning corners and, if possible, tight enough to prevent the towing coupling from dropping on the ground.

## Tyres

When towing, your tyres should be inflated to the maximum recommended pressure. Refer to tyre placard in glovebox.

**CAUTIONS:**

1. **A frame mounted equalizing hitch with a sway control of sufficient capacity is required for trailers over 500 kg loaded weight.**
2. **Trailer brakes are required on trailers over 500 kg loaded weight, except where State Laws may specify a lower limit. Some States specify that the maximum load to be towed must not exceed the vehicle weight.**
3. **It is permissible to tap into the rear brake system with a signal generating unit using not more than 0.21 cc of fluid displacement during the operation of the brakes. It must not be fitted to the front brake system.**
4. **The brakes on the trailer or caravan must be designed to cope with the braking requirements of that trailer or caravan under all towing conditions without adversely affecting the brakes on the towing car.**
5. **WHENEVER A TOWBAR IS REMOVED, BE CERTAIN TO HAVE ANY MOUNTING HOLES IN THE UNDERBODY PROPERLY SEALED TO PREVENT THE POSSIBLE ENTRY OF EXHAUST FUMES, DUST AND WATER.**
6. **Ensure that the towbar does not obscure the rear licence plate, as this may violate State Law. If necessary, the towbar tongue may need to be removed when not required for towing.**

## Safe Towing Tips

- Your car will handle differently with a load behind. It's a good idea to make a couple of short distance trips with the caravan or trailer before you set off on the big one.
- You should have an extended-arm mirror on **both** sides of the car.
- Headlights may need re-aiming after the loaded caravan has been hitched up, particularly if a load equalizing hitch is not used.
- Use a lower gear, rather than your brakes, when going down steep hills.
- If your caravan or trailer runs off the road behind you, allow the left wheels of your car to run off as well. When it is safe to do so, carefully steer back on to the road. A sudden attempt to steer back could make you swerve dangerously.
- Have your engine tuned before you leave.

# Chapter 8
# Cleaning

Page

8-1 — Cleaning Carpet
8-1 — Cleaning Seat Belts
8-1 — Cleaning Interior Glass
8-2 — Cleaning Trim
8-3 — Washing
8-4 — Wiper Blade Maintenance
8-4 — Cleaning Wheels & Tyres
8-5 — Polishing
8-5 — Removing Spots

**CAUTION: Many cleaners may be poisonous or flammable or may cause damage to the car interior/exterior. To help avoid serious personal injury and/or damage to the car while using any cleaning agents or chemicals you should:**

- **Follow the cleaning product manufacturers recommendations.**
- **Before using a product, ensure that it will not be harmful to the materials used in the car.**
- **Ensure that the car is well ventilated while using any cleaning agents in the interior.**
- **If using any flammable cleaning substance, do not allow naked flames or lighted cigarettes near the car.**

## Carpet

Thoroughly brush or vacuum the carpet to remove loose dirt etc. If the carpet is extremely soiled it can be cleaned using AC Delco Velour Fabric & Vinyl Cleaner. Clean approximately one square foot at a time. After cleaning the carpet, use an air hose or hair dryer to dry the carpet.

## Seat Belts

Cleaning of the seat belts can be carried out by using a mild non-abrasive soap and luke warm water. After washing be sure to thoroughly sponge the washing solution out of the belts. Do not allow the belts to retract until they are thoroughly dry. Do not bleach or dye belts since this may severely weaken them.

## Glass

Glass surfaces should be cleaned on a regular basis. Use of AC Delco Glass Cleaner or a household, glass cleaner will remove normal tobacco smoke and dust films sometimes caused by ingredients used in vinyls and interior plastics.

Never use abrasive cleaners as they may cause scratches. If abrasive cleaners are used on the inside of the rear window the electric defroster element may be damaged. Avoid placing stickers on the inside rear window, since they may have to be scraped off later.

## Fabric-Type

Dust and dirt which accumulates on the surface of fabric-type trim should be removed regularly with a vacuum cleaner or soft brush.

It is essential that spots or stains be removed from trim fabric as soon as possible after they have been made. If allowed to remain on the fabric for any length of time they very often become oxidised or set, and removal becomes difficult if not impossible.

**REMOVAL OF NON-GREASY STAINS —** Includes tomato sauce, coffee (black), egg, fruit, fruit juice, soft drinks, wine, blood, etc.

- Carefully scrape off excess stain, then sponge fabric with cool water.
- If a stain remains, use a mild soap solution or cleaner such as AC Delco Fabric and Vinyl Cleaner.
- **Use suds only on a clean sponge or soft bristle brush. Do not saturate the fabric or rub it harshly with a brush. Immediately after cleaning, wipe off excess suds with a slightly damp absorbent cloth.**
- **Immediately after wiping, force-dry the fabric with an air hose or hair dryer.** (Use caution with hair dryer to help prevent fabric damage.)

**REMOVAL OF GREASE, OIL AND FAT STAINS —** Includes grease, oil, butter, margarine, shoe polish, coffee with cream, chewing gum, cosmetic creams, vegetable oils, wax crayon, tar and asphalts.

- Carefully scrape off excess stain, then use a suitable Spot Cleaner (Solvent Type). USE VERY LITTLE CLEANER, light pressure and clean cloths (preferably cheesecloth). Cleaning should start at the outside of the stain, "FEATHERING" toward the centre. Keep changing to a clean section of the cloth.
- When you clean a stain from fabric, immediately dry the area with an air hose or hair dryer to help prevent a cleaning ring. (Use caution with hair dryer to help prevent fabric damage.)
- If a ring forms, immediately repeat the cleaning operation over a slightly larger area with emphasis on "FEATHERING" towards its centre.
- Shoe polish, wax crayons, tar and asphalts will stain if left on trim, they should be removed as soon as possible. Use caution as the cleaner will dissolve them and may cause them to "bleed".

After cleaning, or better still when the vehicle is new, apply AC Delco Fabric Protector to help guard the fabric from future soiling.

## Cleaning Vinyl Trim

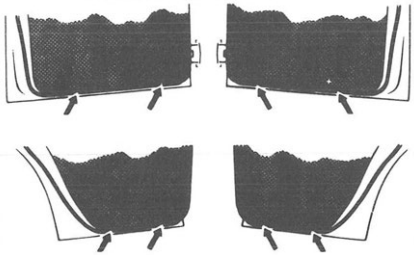
Vinyl trim material should be regularly wiped over with a damp cloth to remove surface dust and dirt.

Should dirt accumulate and become embedded in the material pattern, the following procedure is recommended.

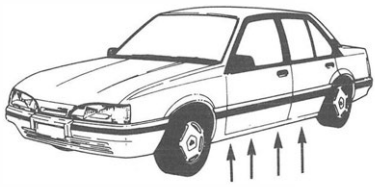
1. Using luke warm water and soap, or AC Delco Velour Fabric and Vinyl Cleaner, work up thick suds on a piece of cheesecloth, and apply to the surface. A soft bristle brush can be used to advantage to remove stubborn stains or dirt embedded in the grain of the material.
2. Wipe off suds with a damp, clean cloth.
3. Wipe dry with a soft cloth.

Before washing your car, check that the door drain holes and rocker panel vents are free of dirt which could trap water inside (see locations below). Clear if necessary with a blunt ended instrument, taking care not to damage any protective coating.

DOOR DRAIN HOLES



ROCKER PANEL VENTS



If the car is in continuous use, it should be washed, regularly. Washing not only removes dirt and general road grime but also dilutes airborne acids resulting from industrial and natural fallout. To avoid corrosion, it is essential that cars used in coastal areas be regularly washed to remove salt deposits.

Before washing, ensure the car is cool. DO NOT wash paintwork while the car is exposed to strong, hot sunlight.

a) Starting from the roof with cold, running water, hose the car all over from top to bottom. Do not use sponge or cloth at this stage. This will remove grit and other loosely adhering substances which could otherwise scratch the paint if a cloth was used.

b) To a normal, household bucket filled with lukewarm water, add NO MORE than two capfuls (approx. 15 ml) of a liquid detergent.

c) Soak a clean sponge in the bucket then apply liberally by wiping over the roof and all the exterior glass. Do not allow to dry out. Rinse off immediately with cold running water from the hose.

d) Repeat this process, leaving the wheels until last. Do only a section at a time and do not forget to rinse off the 'soapy' section before it dries.

e) After a final cold water rinse all over, the car should be dried with a good quality chamois, paying particular attention to all glass and chromed trim.

## Underbody

When a car has been exposed to excessive mud and/or corrosive materials such as boat launching, driving along beaches or on tracks through fertilized paddocks, etc. — the underbody and wheels must be promptly flushed with fresh water, otherwise accelerated rusting and deterioration of underbody components such as brake and fuel lines will result.

## Wiper Blade Maintenance

Much of the oil and road scum thrown up onto windscreen glass, causing smearing when the wiper is switched on, transfers onto the wiper blade. Many owners, whilst they methodically clean the windscreen, omit to clean the wiper blades and consequently smearing of the glass re-appears immediately the wiper blades are set in motion.

The blades can be cleaned by simply lifting them off the glass and then washing the wiping edge carefully with warm water and a suitable detergent.

NOTE:

- Never operate the wiper blades by hand as this may damage the wiper drive mechanism.
- Old or poorly maintained wiper blades can cause windscreen scratching and/or a smeary wipe.Therefore, the rubber element should be replaced once or twice each year.
- If your car is to be stored for long periods, the blades should be lifted clear of the windscreen by placing the arms in the "lock back" position. Failure to do this can result in the rubber element becoming permanently distorted.

## Cleaning Tyres

Sponging with cold water is all that is necessary for normal cleaning of the tyres. Oil and grease should be removed with soap, water or detergent. For tar or other substances, a mild abrasive such as mechanics' hand soap or kitchen cleaning powder, may be used if necessary. Thoroughly wash the tyres with water to finish. NEVER use petrol to clean tyres.

New tyres can be restored by using AC Delco Tyre Black.

## Cleaning Alloy Wheels

To preserve the original appearance of alloy wheels (where fitted) keep them clean and free from build up of road dirt. AC Delco Mag Wheel Cleaner can be used for cleaning most alloy wheels, however, it is not suitable for cleaning highly polished alloy wheels (refer to instruction on bottle). Do not use abrasive cleaners, as they could damage the protective coating.

## Polishing

Do not attempt to apply any polish to paint finish without first thoroughly washing the car.

Regular polishing with a mild polishing cream, such as AC Delco part number M37219 (available from your GM-H Dealer), will enhance the appearance of the paintwork. Polishing also assists in the removal of foreign deposits not normally removed from the paint surface.

If silicon type polishes are used, apply sparingly to avoid build up of polish layers on the paint film. These layers of polish detract from the original sheen of the paint finish. Note that the use of silicon type polish on paint less than three months old is not recommended.

Unpainted, plastic bumpers and body side mouldings (where fitted) can be washed normally but should NOT be polished as this may lead to unsightly polish residue in the grained finish. Painted, plastic bumper bars and side mouldings can be washed and polished with the rest of the car.

## Removing Harmful Deposits

Any deposited material, whether natural or industrial, should be removed from the paintwork as soon as possible. If left too long the paintwork could be permanently marred.

BIRD & INSECT EXCRETION, TREE SAP & OTHER NATURAL DEPOSITS — For this type of stain removal, FIRST use a warm water detergent mixture (as when washing) and rinse off with clean, running water. Repeat if necessary and dry. Many 'Natural' types of fall out are water soluble and will be removed with this simple method.

GREASE, OIL, TAR & OTHER BITUMINOUS TYPE DEPOSITS — Remove with a little kerosene or mineral turpentine and then thoroughly hose and wash treated area immediately.

NOTE: Do not apply kerosene or mineral turpentine to hot paintwork. Always allow paintwork to cool down first. Also do not allow petrol to contact paintwork. Should this occur, wash off petrol immediately with clean water.

Any staining or spotting which remains after removing the deposits may be removed by polishing.

## Repairing Damaged Paintwork

Regular inspection of the car should be made for scratch marks, cracks or damaged areas, all of which could develop rust and thus affect paint finish. Any deep scratches,cracks or break-down in the finish should be repaired without delay. Care should be taken to ensure that any rusting is counteracted immediately, otherwise rust "creep" will extend beyond the damaged area. This applies particularly in sub-tropical areas or coastal districts, where the moist or salt-laden atmosphere accelerates rusting if it is allowed to develop.

Note: Although the paintwork of your car will provide a high degree of protection against the weather, normal wear and deterioration will take place when it is exposed to the elements for prolonged periods of time. YOU SHOULD THEREFORE PROTECT OR GARAGE YOUR CAR WHENEVER POSSIBLE.

| HOLDEN'S PART NO. | SIZE | PART NAME | USAGE |
|---|---|---|---|
| M37432 | 390 × 370 mm | Synthetic Chamois | Absorbs water and cleans paint, glass and chrome surfaces. |
| * M37226 | 375 ml | Wash & Wax | Cleans away dirt and grime and at the same time adds a lustrous shine. |
| * M37221 | 375 ml | Liquid Silicon Polish | Imparts a high gloss, long lasting shine. |
| M39219 | 1 litre | Liquid Polish | Exterior cleaner and polish. |
| M38695 | 250 ml | Glass Cleaner | Cleans all glass surfaces. |
| M37933 | 500 ml | Optikleen | Washer reservoir additive. |
| M38692 | 250 ml | Mag Wheel Cleaner | Cleans all magnesium alloy wheels. |
| M38693 | 400 g | Fabric Protector | Repels oil, grease and Water-borne stains on most fabric. |
| M38424 | 350 g | Velour Fabric & Vinyl Cleaner | Cleans and deodorises velour, most fabrics and vinyl upholstery, hood linings, mats and carpets. |
| M38696 | 250 ml | Vinyl & Rubber Conditioner | Preserves and protects vinyl, leather and rubber. |
| M37429 | 304 × 250 mm | Demister Cloth | Delays formation of mist on treated glass surfaces. |
| M38694 | 250 ml | Tyre Black | Low-sheen natural rubber finish for tyres. |
| M37223 | 400 g | Degreaser | Removes oil and grease from motors. |
| M37225 | 175 g | AC-4 | — dispenses moisture on wet motors and electrical components.<br>— penetrates and loosens rusted or seized parts.<br>— lubricates and protects against corrosion.<br>— inhibits corrosion on battery terminals. |
| M33028 | 27 g | Solid Oil | Lubricants for locking mechanisms, door hinges, sticking windows. |
| M39168 | 100 ml | Car Freshner | Deodorant — removes smoke and other odours. |
| M39169 | 250 ml | Spot Cleaner | Multi purpose spot and stain remover for trim and carpets. |

* do not use on new paintwork less than 3 months old

| HOLDEN'S PART NO. | SIZE | PART NAME | USAGE |
|---|---|---|---|
| 1050002 | 470 ml | Top Engine Cleaner | Purges gum, carbon, varnish and sludge from internal parts. |
| M39304 | 500 ml | Radiator Cleaner | Use prior to using or replacing coolant/inhibitor. |

# Chapter 9
# Specifications

Page

9-1 — Engine Data

9-2 — General Specifications
incl. transaxle, lubricants etc.

9-3 — Fuses

9-3 — Bulb replacement

9-4 — Tyres

9-4 — Vehicle Dimensions

9-5 — Identification Plates

9-7 — Emission Control

| | | |
|---|---|---|
| Description | | 2 litre, Port Fuel Injected, 4 cylinder engine with overhead cam |
| Firing Order | | 1, 3, 4, 2 |
| Spark Plug | | CR 42 CXLS |
| Oil | Specification | — SAE 20W/40, SF grade engine oil<br>— If operating in temperatures over 30°, use SF grade engine oil 20W/50<br>— For prolonged use in snow areas, use SF grade engine oil 15W/30 |
| | Capacity | 3.0 litres (add 0.5 litres for filter) |
| Coolant | Specification | — Corrosion protection: 97% water and 3% corrosion inhibitor meeting Holden's Spec. no. HN1109 (part no. M39060)<br>— Anti-freeze and Corrosion protection: 2 parts water and 1 part anti-freeze meeting GM 1899M Specification. |
| | Capacity | 8 litres |
| Radiator Cap Pressure | | 120 kPa |
| Piston Displacement | | 1998 cc ($cm^3$) |
| Compression Ratio | | 8.8:1 |
| Stroke | | 86 mm |
| Bore Diameter | | 86 mm |
| Torque | | 176 Nm |
| Power | | 85 Kw |
| Taxable Horsepower | | 18.34 |
| Idle Mixture Settings | | Idle mixture and idle speed are programmed into the ECM and cannot be changed. The throttle blade stop has been preset and capped and should not be altered. |

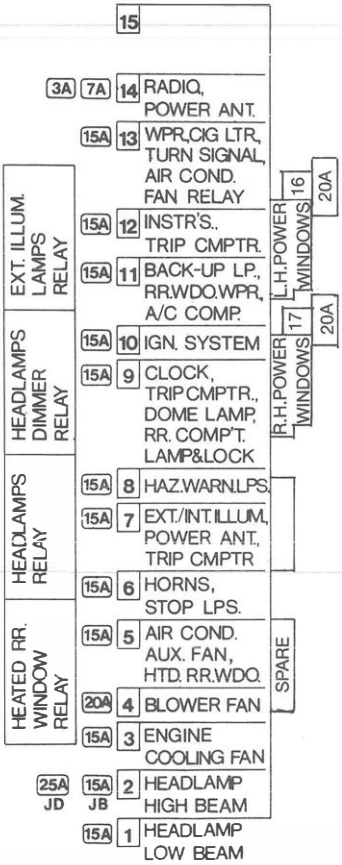
**NOTE:** Non-detergent and other low quality oils are specifically *not* recommended. The use of break-in oils, tune-up compounds, friction-reducing compounds and other supplemental additives are *not* recommended; their use will not only increase operating costs, but may be detrimental to the operation of your car.

**NOTE:** Engine tune-up data, including spark plug gap, timing and idle speed will be found on the Emission Label, inside the engine compartment of your car. Refer page 9-8 for exact location.

| Transaxles | | 5 speed MANUAL | 3 speed AUTOMATIC |
|---|---|---|---|
| Gear Ratios | 1st | 3.42:1 | 2.84:1 |
| | 2nd | 1.95:1 | 1.60:1 |
| | 3rd | 1.28:1 | 1.00:1 |
| | 4th | 0.89:1 | — |
| | 5th | 0.71:1 | — |
| | Rev | 3.33:1 | 2.07:1 |
| Oil Capacity | | 2 litres | 3.8 litres (service fill) |
| Fluid Specification | | SAE 80W GL3 gear oil meeting Holden's specification HN1820 | Dexron 11D* automatic transmission fluid |

| | |
|---|---|
| Final Drive Ratios | Automatic Transaxle — 3.33:1<br>Manual Transaxle — 3.94:1 |
| Power Steering Fluid Specification | DEXRON 11D* automatic transmission fluid (Holden's part no 9985286) |
| Brake Fluid Specification | Heavy Duty Brake Fluid, meeting Holden's Specification HN 1796 (Holden's part no 92026651) |
| Rear Wheel Bearings Specification | Special grease, non-soap type, meeting (Holden's specification HN 1227) |
| All Lock Cylinders | Powdered graphite (applied through key aperture — do not oil) |
| —Bonnet Catch, Lock & Hinge<br>—Door Hinge & Hold opens<br>—Tailgate/Boot Hinge & Lock<br>—Throttle Control Pivot Points<br>—Door Lock Fork & Striker Bolt | No. 1 Lithium (Zinc Oxide) Grease, meeting Holden's specification HN 1225 |
| —Clutch & Brake Pedal Pivots<br>—Clutch Cable Clevises<br>—Park Brake System Pivot & Guides | Molybdenum Disulphide grease, meeting (Holden's specification HN 1271) |

* Dexron 11D is a registered trademark of General Motors Corporation.


15
3A 7A 14 RADIO, POWER ANT.
15A 13 WPR,CIG LTR, TURN SIGNAL, AIR COND. FAN RELAY
15A 12 INSTR'S., TRIP CMPTR.
15A 11 BACK-UP LP., RR.WDO.WPR., A/C COMP.
15A 10 IGN. SYSTEM
15A 9 CLOCK, TRIP CMPTR., DOME LAMP, RR. COMP'T. LAMP&LOCK
15A 8 HAZ.WARN.LPS.
15A 7 EXT./INT.ILLUM., POWER ANT., TRIP CMPTR
15A 6 HORNS, STOP LPS.
15A 5 AIR COND. AUX. FAN, HTD. RR.WDO.
20A 4 BLOWER FAN
15A 3 ENGINE COOLING FAN
25A JD 15A JB 2 HEADLAMP HIGH BEAM
15A 1 HEADLAMP LOW BEAM
EXT. ILLUM. LAMPS RELAY
HEADLAMPS DIMMER RELAY
HEADLAMPS RELAY
HEATED RR. WINDOW RELAY
L.H.POWER WINDOWS 16 20A
R.H.POWER WINDOWS 17 20A
SPARE

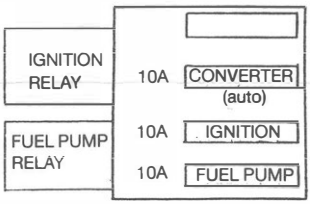
The main fuse panel (shown left) is on the instrument panel, on the lower, right side of the steering column, refer page 1-0 for exact location.

To remove the cover, pull down the top edge by hand.

Note: It is permissable to use a 7.5 amp fuse instead of a 7 amp fuse for position 14.

Note: JE model Camiras; use 25 amp fuse in position 2.

The separate, fuse/relay box (shown below) for the engine system is located in the engine compartment, near the passenger side strut tower.




| Bulb Replacement | Holden's Part No. | Base type | Rating |
|---|---|---|---|
| Headlamps — Hi/Lo Beam Outboard | 11071361 | H4 | 60/55w |
| — Driving Inboard | 11063979 | H3 | 55w |
| Parking (Front) | 9421330 | Wedge | 5w |
| Turn signal | 9417866 | Std. parallel pin | 21w |
| Back up lamp | 9417866 | Std. parallel pin | 21w |
| Stop and tail | 7125845 | Std. offset pin | 21/5w |
| Rear compartment lamp | 11030669 | Festoon | 10w |
| Number plate lamp (sedan) | SP1467 | Std parallel pin | 6w |
| Number plate lamp (wagon) | 9421330 | Wedge | 5w |
| Dome lamp | 5821940150 | Festoon | 10w |
| Glove box | 11015639 | Festoon | 5w |

## Tyre Specifications Table

(**NOTE:** Always refer to the placard in the glove box for **specifications for your vehicle.**)

| Model | Wheel | Tyre size | Recommended cold inflation pressure kPa (P.S.I.) | | | |
|---|---|---|---|---|---|---|
| | | | Up to 3 passengers | | Up to max. load | |
| | | | Front | Rear | Front | Rear |
| SL | 5.5JJ × 14 Steel | P185/65 HR14 | 180*(26) | 180*(26) | 240(34) | 240(34) |
| SL/X | 5.5JJ × 14 Steel | P185/65 HR14 | 180*(26) | 180*(26) | 240(34) | 240(34) |
| SL/E | 5.5JJ × 14 Alloy | P185/65 HR14 | 180*(26) | 180*(26) | 240(34) | 240(34) |

*Where shown, 30 Kpa (4psi) to be added when vehicle is used in constant high speed.

## Wheel Nut Torques

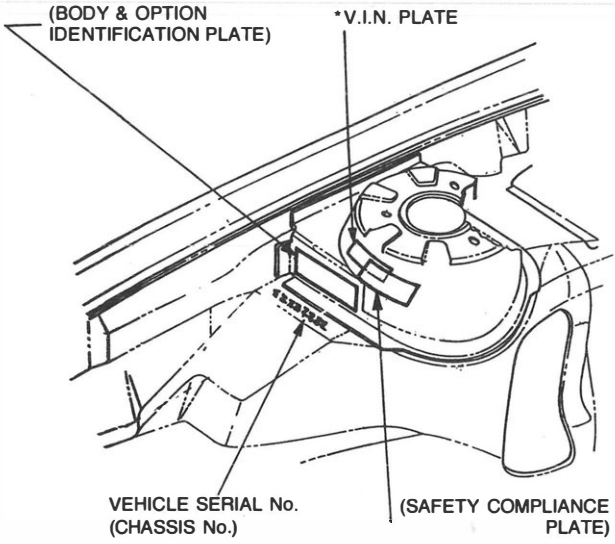
Recommended Wheel Nut Torque is 95-100 Nm (70-76 ft lbs)

## Approximate Vehicle Dimensions

**(In millimetres unless shown otherwise)**

| ITEM | SEDAN | | | WAGON | | |
|---|---|---|---|---|---|---|
| | SL | SL/X | SL/E | SL | SL/X | SL/E |
| Length | 4407 | 4407 | 4407 | 4353 | 4353 | 4353 |
| Width | 1668 | 1668 | 1668 | 1668 | 1668 | 1668 |
| Height* | 1349 | 1347 | 1341 | 1347 | 1345 | 1339 |
| Wheelbase (at kerb mass) | 2577 | → | → | → | → | → |
| Track (at kerb mass) | 1403 | → | → | → | → | → |
| Turning Circle | | | | | | |
| Kerb to kerb (metres) Manual | 10.2 | → | → | → | → | → |
| Power | 10.6 | → | → | → | → | → |
| Wall to wall (metres) Manual | 10.9 | → | → | → | → | → |
| Power | 11.3 | → | → | → | → | → |
| Minimum Running Ground Clearance* | TBA | → | → | → | → | → |

*Dimensions shown are for vehicles at kerb mass plus the following loads:
Sedan — 4 occupants @ 68 kg each.
Wagon — 4 occupants @ 68 kg each plus 45 kg luggage.

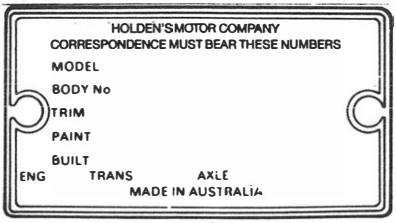



*This plate is located on the left hand side strut tower.

## Body and Option Identification Plate

The plate shows body style, body serial number, paint and trim colour combination, paint number, engine transmissions, axle ratio options and built date.

The built date is defined as "the date of manufacture" by calendar month and year in which the body shell and power train sub-assemblies are co-joined and the vehicle is driven or moved from the production line.




## Vehicle Serial Number

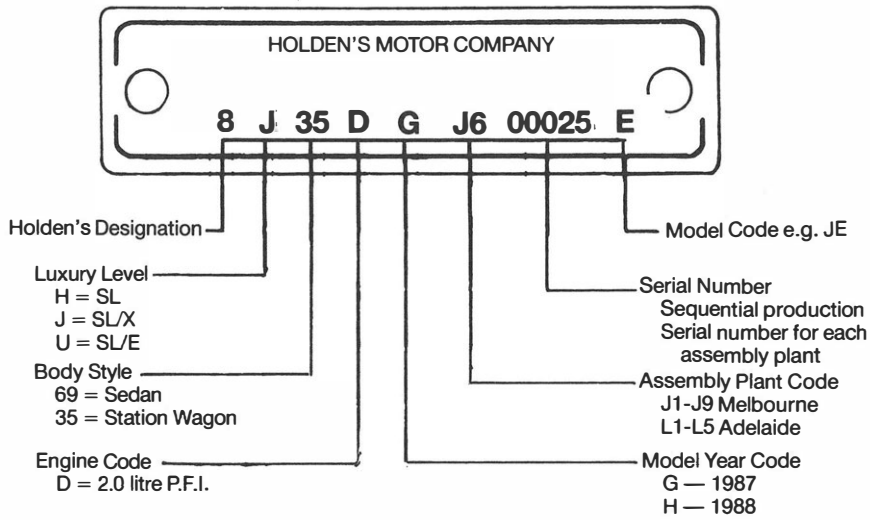
**(Chassis Number)**

This number is stamped into the wheelhouse panel, just in front of the driver's side strut tower.

## Engine Number Stamp

Every engine has its own individual identification number stamped into the engine block, adjacent to the dipstick.

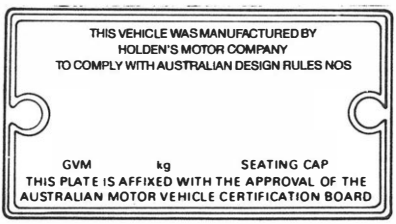
## Vehicle Identification Number (V.I.N.) Plate




Therefore model codes are as follows:—
8JH69 = SL Sedan
8JH35 = SL Wagon
8JJ69 = SL/X Sedan
8JJ35 = SL/X Wagon
8JU69 = SL/E Sedan
8JU35 = SL/E Wagon

## Safety Compliance Plate

Shown on the plate are the vehicle Make, Model Name and Style, Month and Year of Manufacture, Vehicle Serial Number, approved seating capacity and the Australian Design Rules with which the vehicle complies.


THIS VEHICLE WAS MANUFACTURED BY
HOLDEN'S MOTOR COMPANY
TO COMPLY WITH AUSTRALIAN DESIGN RULES NOS
GVM kg SEATING CAP
THIS PLATE IS AFFIXED WITH THE APPROVAL OF THE
AUSTRALIAN MOTOR VEHICLE CERTIFICATION BOARD

Your vehicle is fitted with emission control systems which are designed to reduce the amount of hydrocarbons (HC), carbon monoxide (CO), and oxides of nitrogen ($NO_x$) that are emitted from the engine and fuel system into the atmosphere. Hydrocarbons and oxides of nitrogen, when exposed to sunlight under certain conditions, produce photochemical smog. In addition, carbon monoxide is toxic when it becomes highly concentrated in the air.

The three major emission control systems fitted to your vehicle are:

1. **Evaporative Emission Control System** (Australian Vehicles Only)
   This system is designed to prevent the escape of fuel vapours from the fuel system and recycle them through the normal combustion process.
2. **Crankcase Emission Control System**
   This system is designed to prevent blow-by gases from escaping into the atmosphere and recycle them through the combustion process.
3. **Exhaust Emission Control System**
   The various components of this system operate collectively to limit HC, CO and $NO_x$ emissions in the exhaust gas. The exhaust Emission Control System is comprised of components including the Delco electronic control of spark, fuel, idle speed, automatic transaxle converter clutch and other functions. In addition, Australian vehicles have a catalytic converter and closed loop mixture control system.

For detailed information on the operation, servicing and repair procedures for these systems, refer to the appropriate service manual for your vehicle.

## Owner Responsibility

Your vehicle's emission control systems have been designed to meet the requirements of Australian Design Rules and State Regulations.

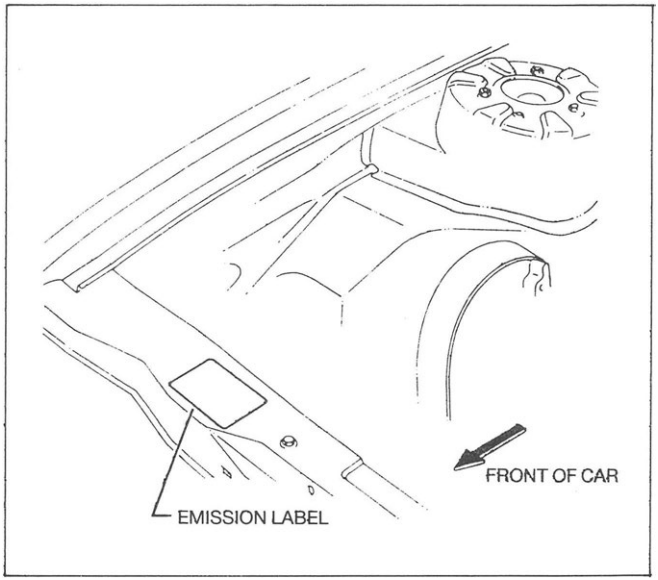
To ensure that these components achieve their purpose of controlling the emission of pollutants to the atmosphere, the engine or exhaust system of your vehicle must **not** be modified in any way. Any departure from the manufacture's design specifications may increase the emissions or otherwise defeat the intent of the regulations.

**IMPORTANT:** ANY PERSON WHO REMOVES, MODIFIES OR OTHERWISE RENDERS INEFFECTIVE ANY EMISSION CONTROL COMPONENTS FITTED TO A VEHICLE WILL BE CONTRAVENING THE RELEVANT REGULATIONS AND BE GUILTY OF AN OFFENCE UNDER THE REGULATIONS. ANY PERSON WHO OWNS AND/OR OPERATES SUCH A VEHICLE COULD ALSO BE GUILTY OF AN OFFENCE UNDER THE REGULATIONS.

## Maintenance Requirements

To ensure continuing compliance with the regulations it will be necessary for you to maintain your vehicle's emission control system in accordance with the instructions given in the Maintenance Plan (refer Chapter 10) and the relevant Service Manuals.

It is recommended that the necessary servicing be performed by an authorised GMH Dealer who has the specialised servicing equipment and trained personnel available to ensure that the adjustments and services specified are carried out.


FRONT OF CAR
EMISSION LABEL

# Chapter 10 Maintenance Schedule

Page
10-1 — When to have your car serviced
10-2 — Extreme Operating Conditions
10-3 — Maintenance Schedule
– What is actually performed at each service
10-5 — Suggested times for each service
10-6 — 1,500 Km or 1 month inspection
10-8 — 5,000 Km or 3 months Service
10-10 — 15,000 Km or 9 months Service
10-12 — 25,000 Km or 15 months Service
10-14 — 35,000 Km or 21 months Service
10-16 — 45,000 Km or 27 months Service
10-18 — 55,000 Km or 33 months Service
10-20 — 65,000 Km or 39 months Service
10-22 — 75,000 Km or 45 months Service
10-24 — 85,000 Km or 51 months Service
10-26 — 95,000 Km or 57 months Service
10-28 — 105,000 Km or 63 months Service
10-30 — 115,000 Km or 69 months Service
10-32 — 125,000 Km or 75 months Service
10-34 — Change of Name/address/ownership

When it comes to service, remember that your GM-H Dealer has the trained personnel and specialised equipment to correctly service your vehicle. Your dealer invites you to return for all your service needs both during and after the warranty period.

The safety, economy, emission control, performance and reliability of your Camira cannot be assured unless regular maintenance is performed, preferably by factory-trained technicians.

Therefore, it is in the owner's interest that the following services are performed at the specified Distance or Months (whichever occurs first).

- 1,500 km — 1 Month
- 5,000 km — 3 Months
- 15,000 km — 9 Months
- 25,000 km — 15 Months
- 35,000 km — 21 Months
- 45,000 km — 27 Months
- 55,000 km — 33 Months
- 65,000 km — 39 Months
- 75,000 km — 45 Months
- 85,000 km — 51 Months
- 95,000 km — 57 Months
- 105,000 km — 63 Months
- 115,000 km — 69 Months
- 125,000 km — 75 Months

The one month — 1,500 kilometres service will be performed without cost for labour by the Selling Dealer.

This service may be carried out by another GM-H Dealer provided you have a letter of Introduction from the Selling Dealer. Your Dealer will supply the necessary letter of Introduction upon request.

The services shown in this schedule between 1,500 and 125,000 km are to be performed after 125,000 km at the same intervals.

**NOTE: All maintenance services as listed in this handbook and replacement of service items are the responsibility of the owner and as such are NOT considered, under the provisions of the new vehicle warranty to be rectification of defects in material and workmanship. Items such as wheel alignment, necessary adjustments to drive belts, transaxle, clutch, parking brake etc. or any other items which may require servicing due to fair wear and tear will be carried out at the owner's cost.**

**Failure to have proper maintenance services carried out by an Authorised GM-H Dealer or service Dealer may void your new vehicle warranty.**

**It is strongly recommended that you read the "New Vehicle Warranty" on page 5-1, so that you are conversant with your entitlements.**

As each service is performed and the coupon removed, the following service coupon is readily visible to remind you when the next service is due.

After the service is completed, the owner should see that the Validation Record is stamped and signed by the Dealer. This is important as it will not only assist in the determination of Warranty Claims, but enhance the value of the vehicle whenever resale is contemplated.

If your vehicle operates under any of the extreme conditions listed in the following table it is recommended that some items be serviced more frequently than the intervals specified in the Maintenance Plan.

**NOTE:** The extra services listed below should only be used if your vehicle operates continuously under the conditions specified.

If you operate under any of these conditions on a one off basis e.g. holiday trip, then an extra service should be for that period only.

As a guide, if you operate continually for a period of one month or 1,500 kilometres under any of the extreme conditions, then this could qualify for additional services.

If, at any time it is considered that the items below (or other items) should be more frequently serviced due to the type of operation or before a long trip, discuss the situation with the service manager of your GM-H Dealer.

| | Engine oil — Change @ 5,000 km | Oil filter — Replace @ 5,000 km | Air cleaner element Replace @ 20,000 km | Auto. trans. fluid (if fitted) Change @ 20,000 km | @ 5000 km Inspect for damage, wear & leaks Suspension, steering, exhaust, driveshafts, brake & fuel lines | Remove drums, clean & inspect Rear Brakes @ 10,000 km |
|---|---|---|---|---|---|---|
| Dust, dirt, loose road material | × | × | × | | × | × |
| Muddy and wet areas | | | | | × | × |
| Cold weather (below 5°C) and when most trips are less than 5 km | × | | | | | |
| Stop-start, excessive idling or low speed operation as experienced in inner city driving. e.g. taxi, door to door delivery | × | | | × | | × |
| Caravan or Trailer Towing | × | | | × | | × |

| SERVICE INTERVAL (use odometer reading or months, whichever occurs first) | × 1000 km | 1.5 | 5 | 15 | 25 | 35 | 45 | 55 | 65 | 75 | 85 | 95 | 105 | 115 | 125 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | or months | | 3 | 9 | 15 | 21 | 27 | 33 | 39 | 45 | 51 | 57 | 63 | 69 | 75 |
| **UNDERHOOD OPERATIONS** Check all fluid levels (where applicable): Brake fluid, coolant, windscreen washer, auto transaxle, power steering. Top up as required with specific fluid. | | × | × | × | × | × | × | × | × | × | × | × | × | × | × |
| Check electrolyte and fluid level of battery (where applicable). Check open circuit voltage. | | × | × | × | × | × | × | × | × | × | × | × | × | × | × |
| Check engine cooling fan operates within 5 mins. of turning on A/C. | | | | × | × | × | × | × | × | × | × | × | × | × | × |
| Check condition and tension of all engine drive belts using gauge. Adjust if necessary. | | × | | × | | × | | × | | × | | × | | × | |
| Replace camshaft drive belt. | | | | | | | × | | | | × | | | | × |
| Check condition. Attachment and routing of all hoses and pipes in engine compartment. Includes brake, fuel, engine coolant, power steering, air conditioning and emission control systems. | | × | | × | × | × | × | × | × | × | × | × | × | × | × |
| Drain, flush and refill cooling system with pre-mixed coolant comprising water and recommended inhibitor. Inspect hoses and clamps. Clean outside of radiator and A/C condensor (where fitted). | | | | × | | × | | × | | × | | × | | × | |
| Pressure test cooling system and surge tank cap. Check for leaks. | | × | × | × | × | × | × | × | × | × | × | × | × | × | × |
| Air conditioning — check refrigerant charge at sight glass. | | × | | × | | × | | × | | × | | × | | × | |
| Lubricate clutch cable to fork level pivot. | | | | | × | | × | | × | | × | | × | | × |
| Lubricate auto transaxle control cable pivots. | | | | | × | | × | | × | | × | | × | | × |
| Lubricate throttle linkage. | | | | × | | × | | × | | × | | × | | × | |
| Check engine ventilation idle metering orifice for restriction. | | | | | | × | | | | × | | | | × | |
| Replace engine air cleaner element. | | | | | | × | | | | × | | | | × | |
| Replace spark plugs, check resistance of plug leads. Inspect condition of distributor cap and rotor. | | | | | × | | × | | × | | × | | × | | × |
| Check ignition timing. | | × | | | | | × | | | | × | | | | × |
| Check evaporative emission canister for air leaks and/or restriction to air flow through the ports. | | | | | | × | | | | × | | | | × | |

| SERVICE INTERVAL × 1000 km (use odometer reading or months, whichever occurs first) or months | 1.5 | 5<br>3 | 15<br>9 | 25<br>15 | 35<br>21 | 45<br>27 | 55<br>33 | 65<br>39 | 75<br>45 | 85<br>51 | 95<br>57 | 105<br>63 | 115<br>69 | 125<br>75 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **UNDER VEHICLE OPERATIONS** | | | | | | | | | | | | | | |
| Change engine oil. | | × | × | × | × | × | × | × | × | × | × | × | × | × |
| Change oil filter. | | × | × | × | × | × | × | × | × | × | × | × | × | × |
| Replace in-line fuel filter. | | | | | × | | | | × | | | | × | |
| Manual transaxle. Check oil level. | × | | × | × | × | × | × | × | × | × | × | × | × | × |
| Manual transaxle. Change oil. | | | × | | | | × | | | | × | | | |
| Automatic transaxle. Drain fluid, replace filter, refill with specified fluid. | | | | | × | | | | × | | | | × | |
| Check all brake and fuel pipes, hoses and connections for condition, leaks and proper attachment. Correct as required. | × | | × | × | × | × | × | × | × | × | × | × | × | × |
| Check steering gear, joints, steering rack boots and all front and rear suspension components for damaged, loose or missing parts, signs of wear or leakage. | × | | × | × | × | × | × | × | × | × | × | × | × | × |
| Check driveshaft CV joint boots for proper attachment, condition and grease loss. | × | | × | × | × | × | × | × | × | × | × | × | × | × |
| Check exhaust system for leakage, security and alignment. Inspect underbody near exhaust system for any condition which could let exhaust fumes into the passenger compartment. Correct as required. | × | | × | × | × | × | × | × | × | × | × | × | × | × |
| Check front disc brake pads for condition and wear (with road wheels removed). | | | × | × | × | × | × | × | × | × | × | × | × | × |
| Remove rear brake drums. Check linings and drums for condition and wear. Check operation of self adjusting mechanism. Inspect wheel cylinders for leakage. | | | | × | | × | | × | | × | | × | | × |
| Inspect, repack and adjust rear wheel bearings. | | | | | × | | | | × | | | | × | |
| Hydraulic brake system — drain and refill with specified fluid from freshly opened container. Bleed system and check brake performance on road test. | | | × | | × | | × | | × | | × | | × | |
| Inspect tyres for irregular wear or damage. If you see abnormal wear, rotate the tyres after determining the cause and correcting any misalignment, balance or contributing mechanical problem. Check wheels for damage. Check tyre inflation pressures. | × | × | × | × | × | × | × | × | × | × | × | × | × | × |
| **INTERIOR VEHICLE OPERATIONS** | | | | | | | | | | | | | | |
| Check operation of all lights (interior and exterior). | × | | × | × | × | × | × | × | × | × | × | × | × | × |
| Check park brake operation. Adjust if necessary. | | | × | × | × | × | × | × | × | × | × | × | × | × |
| Check clutch pedal height. Adjust if necessary. | | | × | × | × | × | × | × | × | × | × | × | × | × |
| Lubricate clutch pedal to cable connection. | | | × | | × | | × | | × | | × | | × | |
| Seat belt inspection — examine webbing condition, buckle operation, retractor mechanism operation, and anchor security. Report any deficiencies. | | | × | | × | | × | | × | | × | | × | |

| SERVICE INTERVAL × 1000 km (use odometer reading or months, whichever occurs first) or months | 1.5 | 5<br>3 | 15<br>9 | 25<br>15 | 35<br>21 | 45<br>27 | 55<br>33 | 65<br>39 | 75<br>45 | 85<br>51 | 95<br>57 | 105<br>63 | 115<br>69 | 125<br>75 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **EXTERIOR VEHICLE OPERATIONS**<br>Lubricate all locks, exterior door handle pivots, door and rear compartment strikers and hold open devices. Check operation and lubricate hood lock and catch. | | | × | | × | | × | | × | | × | | × | |
| **ROAD TEST**<br>Check vehicle on road for braking performance, steering operation, engine response, transmission operation.<br>Check park pawl operation (auto) and neutral start switch (auto).<br>Correct and report any abnormal conditions. | × | × | × | × | × | × | × | × | × | × | × | × | × | × |
| Suggested Labour Time — Hours. | | 0.5 | 1.9 | 1.4 | 2.3 | 1.9 | 1.9 | 1.4 | 2.3 | 1.9 | 1.9 | 1.4 | 2.3 | 1.9 |
| Extra Labour Time for:<br>Automatic Transaxle | | | | | 0.3 | | | | 0.3 | | | | 0.3 | |

### Additions to Basic Service

Additional time and material required for servicing equipment other than that fitted to a base model vehicle (viz: manual transaxle) and repairing or replacing any part found faulty during the service check and inspection, will be added to the Suggested Labour Time and charges.

Where any deficiencies are noted, such items should be reported to the owner/operator so that the extra work required can be authorised.

# 1500 Kilometre or 1 Month Inspection and Adjustment

GMH QUALITY SERVICE & PARTS

This coupon should not be removed until the vehicle is presented for service.

Owner's Name Mr. Mrs. Miss .....

Address .....

Town & State ..... Postcode .....

Reg. No. ..... Model Name .....

V.I.N. ..... Eng. No. .....

Selling Dealer's Stamp & Signature .....

Date of Acquisition .....

This vehicle has been thoroughly checked in accordance with the schedule on the reverse side of this coupon.

Servicing Dealer .....

Town ..... State .....

Owner's Signature .....

**This Inspection & Adjustment will be carried out without charge to the owner except for any lubricants used.**

**The Designated Services are not to be exceeded without the Owner's prior agreement to additional servicing charges.**

PTO

**1500 Kilometre 1 Month Inspection and Adjustment**

This vehicle has been thoroughly checked in accordance with the **1** month — **1,500** kilometre inspection and adjustment.

Dealer .....

Service Manager's Signature .....

Date ..... Odometer Reading .....

## UNDER HOOD OPERATIONS

| | |
|---|---|
| | Check all fluid levels viz: Brake fluid, coolant, windscreen washer, auto transaxle, power steering. Top up as required with specified fluid. |
| | Check condition and tension of drive belts for alternator, power steering and A/C compressor using gauge. Adjust if necessary. |
| | Check condition, attachment and routing of all hoses and pipes in engine compartment. Includes brake, fuel, engine coolant, power steering, air conditioning and emission control systems. |
| | Pressure test cooling system and surge tank cap. Check for leaks. |
| | Check refrigerant charge at sight glass. |
| | Check ignition timing. |
| | Check electrolyte level of battery (where applicable). Check open circuit voltage. |

## UNDER VEHICLE OPERATIONS

| | |
|---|---|
| | Manual transmission. Check oil level. Inspect for leaks. |
| | Check all brake and fuel lines, hoses and connections for condition, leaks and proper attachment. Correct as required. |
| | Check steering gear, joints, steering rack, boots and all front and rear suspension components for damaged, loose or missing parts, signs of wear or leakage. |
| | Check drive shaft CV joints for proper attachment, condition and grease loss. |
| | Check exhaust system for leakage, security and alignment. Correct as required. Also, inspect the underbody for damage or any other condition which would allow exhaust system fumes to seep into the passenger compartment. |
| | Inspect tyres for irregular wear or damage. If you see abnormal wear, rotate the tyres after determining the cause and correcting any misalighment, balance or contributing mechanical problem. Check wheels for damage. Check tyre inflation pressures. |

## INTERIOR VEHICLE OPERATIONS

| | |
|---|---|
| | Check operation of all lights (interior and exterior). |
| | Check operation of all instruments and controls including ignition steering lock, indicator and warning lights, horn, wiper/washer, turn signals, hood lock and catch. Check operation of door, rear compartment and window mechanisms. |
| | Check that heating, ventilation, demisting and air conditioning systems operate correctly. Check that blower operates on each speed setting. |

## EXTERIOR VEHICLE OPERATIONS

| | |
|---|---|
| | Check headlamp aim, adjust if necessary. |

## ROAD TEST

| | |
|---|---|
| | Check vehicle on road for braking performance, steering operation, engine response, transmission operation.<br>Check park pawl operation (auto).<br>Check neutral start switch (auto).<br>Correct and report any abnormal conditions. |

# 5,000 km or 3 Months Service Coupon

GMH QUALITY SERVICE & PARTS

I authorise performance of the services specified on this coupon. I understand that I will be charged for this work which will take approx. 0.5 hr.

There will also be a charge for all lubricants and filters, parts used as a result of checks and additional services performed as requested.

Additional Services Requested:

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.....

.....

.....

Signature ..... Date .....

**UNDER HOOD OPERATIONS**

| | |
|---|---|
| | Check all fluid levels (where applicable): Brake fluid, coolant, windscreen washer, auto transaxle, power steering. Top up as required with specified fluid. |
| | Check electrolyte and fluid level of battery (where applicable). Check open circuit voltage. |
| | Pressure test cooling system and surge tank cap. Check for leaks. |

**UNDER VEHICLE OPERATIONS**

| | |
|---|---|
| | Change engine oil. |
| | Change oil filter. |
| | Inspect tyres for irregular wear or damage. If you see abnormal wear, rotate the tyres after determining the cause and correcting any misalignment, balance or contributing mechanical problem. Check wheels for damage. Check tyre inflation pressures. |

**ROAD TEST**

| | |
|---|---|
| | Check vehicle on road for braking performance, steering operation, engine response, transmission operation.<br>Check park pawl operation (auto) and neutral start switch (auto).<br>Correct and report any abnormal conditions. |

**5,000 km or 3 Month SERVICE VALIDATION**

Servicing Dealer .....

Date of Service .....

Odometer .....

Signed .....

Additional Services Performed:

.....

.....

.....

.....

# 15,000 km or 9 Months Service Coupon

GMH QUALITY SERVICE & PARTS

I authorise performance of the services specified on this coupon. I understand that I will be charged for this work which will take approx. 1.9 hrs.

There will also be a charge for all lubricants and filters, parts used as a result of checks and additional services performed as requested.

Additional Services Requested:

.....

.....

.....

.....

Signature ..... Date .....

**UNDER HOOD OPERATIONS**

| | |
|---|---|
| | Check all fluid levels (where applicable): Brake fluid, coolant, windscreen washer, auto transaxle, power steering. Top up as required with specified fluid. |
| | Check electrolyte and fluid level of battery (where applicable). Check open circuit voltage. |
| | Check engine cooling fan operates within 5 mins. of turning on A/C. |
| | Check condition and tension of all engine drive belts using gauge. Adjust if necessary. |
| | Check condition, attachment and routing of all hoses and pipes in engine compartment. Includes brake, fuel, engine coolant, power steering, air conditioning and emission control systems. |
| | Drain, flush and refill cooling system with pre-mixed coolant comprising water and recommended inhibitor. Inspect hoses and clamps. Clean outside of radiator and A/C condenser (where fitted). |
| | Pressure test cooling system and surge tank cap. Check for leaks. |
| | Air conditioning — check refrigerant charge at sight glass. |
| | Lubricate throttle linkage. |

PTO

**15,000 km or 9 Month SERVICE VALIDATION**

Servicing Dealer .....

Date of Service .....

Odometer .....

Signed .....

Additional Services Performed: .....

## UNDER VEHICLE OPERATIONS

| | |
|---|---|
| | Change engine oil. |
| | Change oil filter. |
| | Manual transaxle. Check oil level. |
| | Manual transaxle. Change oil. |
| | Check all brake and fuel pipes, hoses and connections for condition, leaks and proper attachment. Correct as required. |
| | Check steering gear, joints, steering rack boots and all front and rear suspension components for damaged, loose or missing parts, signs of wear or leakage. |
| | Check driveshaft CV joint boots for proper attachment, condition and grease loss. |
| | Check exhaust system for leakage, security and alignment. Inspect underbody near exhaust system for any condition which could let exhaust fumes into the passenger compartment. Correct as required. |
| | Check front disc brake pads for condition and wear (with road wheels removed). |
| | Hydraulic brake system — drain and refill with specified fluid from freshly opened container. Bleed system and check brake performance on road test. |
| | Inspect tyres for irregular wear or damage. If you see abnormal wear, rotate the tyres after determining the cause and correcting any misalignment, balance or contributing mechanical problem. Check wheels for damage. Check tyre inflation pressures. |

## INTERIOR VEHICLE OPERATIONS

| | |
|---|---|
| | Check operation of all lights (interior and exterior). |
| | Check park brake operation. Adjust if necessary. |
| | Check clutch pedal height. Adjust if necessary. |
| | Lubricate clutch pedal to cable connection. |
| | Seat belt inspection — examine webbing condition, buckle operation, retractor mechanism operation, and anchor security. Report any deficiencies. |

## EXTERIOR VEHICLE OPERATIONS

| | |
|---|---|
| | Lubricate all locks, exterior door handle pivots, door and rear compartment strikers and hold open devices. Check operation and lubricate hood lock and catch. |

## ROAD TEST

| | |
|---|---|
| | Check vehicle on road for braking performance, steering operation, engine response, transmission operation.<br>Check park pawl operation (auto) and neutral start switch (auto).<br>Correct and report any abnormal conditions. |

# 25,000 km or 15 Months Service Coupon

I authorise performance of the services specified on this coupon. I understand that I will be charged for this work which will take approx. 1.4 hrs.

There will also be a charge for all lubricants and filters, parts used as a result of checks and additional services performed as requested.

Additional Services Requested:

.....

.....

.....

.....

Signature ..... Date .....

**UNDER HOOD OPERATIONS**

| | |
|---|---|
| | Check all fluid levels (where applicable): Brake fluid, coolant, windscreen washer, auto transaxle, power steering. Top up as required with specified fluid. |
| | Check electrolyte and fluid level of battery (where applicable). Check open circuit voltage. |
| | Check engine cooling fan operates within 5 mins. of turning on A/C. |
| | Check condition, attachment and routing of all hoses and pipes in engine compartment. Includes brake, fuel, engine coolant, power steering, air conditioning and emission control systems. |
| | Pressure test cooling system and surge tank cap. Check for leaks. |
| | Lubricate clutch cable to fork lever pivot. |
| | Lubricate auto transaxle control cable pivots. |
| | Replace spark plugs, check resistance of plug leads. Inspect condition of distributor cap and rotor. |

PTO

**25,000 km or 15 Month SERVICE VALIDATION**

Servicing Dealer .....

Date of Service .....

Odometer .....

Signed .....

Additional Services Performed:

.....

.....

.....

## UNDER VEHICLE OPERATIONS

| | |
|---|---|
| | Change engine oil. |
| | Change oil filter. |
| | Manual transaxle. Check oil level. |
| | Check all brake and fuel pipes, hoses and connections for condition, leaks and proper attachment. Correct as required. |
| | Check steering gear, joints, steering rack boots and all front and rear suspension components for damaged, loose or missing parts, signs of wear or leakage. |
| | Check driveshaft CV joint boots for proper attachment, condition and grease loss. |
| | Check exhaust system for leakage, security and alignment. Inspect underbody near exhaust system for any condition which could let exhaust fumes into the passenger compartment. Correct as required. |
| | Check front disc brake pads for condition and wear (with road wheels removed). |
| | Remove rear brake drums. Check linings and drums for condition and wear. Check operation of self adjusting mechanism. Inspect wheel cylinders for leakage. |
| | Inspect tyres for irregular wear or damage. If you see abnormal wear, rotate the tyres after determining the cause and correcting any misalignment, balance or contributing mechanical problem. Check wheels for damage. Check tyre inflation pressures. |

## INTERIOR VEHICLE OPERATIONS

| | |
|---|---|
| | Check operation of all lights (interior and exterior). |
| | Check park brake operation. Adjust if necessary. |
| | Check clutch pedal height. Adjust if necessary. |

## EXTERIOR VEHICLE OPERATIONS

| | |
|---|---|
| | Lubricate all locks, exterior door handle pivots, door and rear compartment strikers and hold open devices. Check operation and lubricate hood lock and catch. |

## ROAD TEST

| | |
|---|---|
| | Check vehicle on road for braking performance, steering operation, engine response, transmission operation.<br>Check park pawl operation (auto) and neutral start switch (auto).<br>Correct and report any abnormal conditions. |

# 35,000 km or 21 Months Service Coupon

GMH QUALITY SERVICE & PARTS

I authorise performance of the services specified on this coupon. I understand that I will be charged for this work which will take approx. 2.3 hrs.

Add 0.3 hr. for Automatic Transaxle.

There will also be a charge for all lubricants and filters, parts used as a result of checks and additional services performed as requested.

Additional Services Requested:

.....

.....

.....

.....

Signature ..... Date .....

**UNDER HOOD OPERATIONS**

| | |
|---|---|
| | Check all fluid levels (where applicable): Brake fluid, coolant, windscreen washer, auto transaxle, power steering. Top up as required with specified fluid. |
| | Check electrolyte and fluid level of battery (where applicable). Check open circuit voltage. |
| | Check engine cooling fan operates within 5 mins. of turning on A/C. |
| | Check condition and tension of all engine drive belts using gauge. Adjust if necessary. |
| | Check condition, attachment and routing of all hoses and pipes in engine compartment. Includes brake, engine coolant, power steering, air conditioning emission control systems and fuel. |
| | Drain, flush and refill cooling system with pre-mixed coolant comprising water and recommended inhibitor. Inspect hoses and clamps. Clean outside of radiator and A/C condensor (where fitted). |
| | Pressure test cooling system and surge tank cap. Check for leaks. |
| | Air conditioning — check refrigerant charge at sight glass. |
| | Lubricate throttle linkage. |
| | Check engine ventilation idle metering orifice for restriction. |
| | Replace engine air cleaner element. |
| | Check evaporative emission canister for air leaks and/or restriction to air flow through the ports. |

PTO

**35,000 km or 21 Months SERVICE VALIDATION**

Servicing Dealer .....

Date of Service .....

Odometer .....

Signed .....

Additional Services Performed: .....

**UNDER VEHICLE OPERATIONS**

| | |
|---|---|
| | Change engine oil. |
| | Change oil filter. |
| | Replace in-line fuel filter. |
| | Manual transaxle. Check oil level. |
| | Automatic transaxle. Drain fluid, replace filter, refill with specified fluid. |
| | Check all brake and fuel pipes, hoses and connections for condition, leaks and proper attachment. Correct as required. |
| | Check steering gear, joints, steering rack boots and all front and rear suspension components for damaged, loose or missing parts, signs of wear or leakage. |
| | Check driveshaft CV joint boots for proper attachment, condition and grease loss. |
| | Check exhaust system for leakage, security and alignment. Inspect underbody near exhaust system for any condition which could let exhaust fumes into the passenger compartment. Correct as required. |
| | Check front disc brake pads for condition and wear (with road wheels removed). |
| | Inspect, repack and adjust rear wheel bearings. |
| | Hydraulic brake system — drain and refill with specified fluid from freshly opened container. Bleed system and check brake performance on road test. |
| | Inspect tyres for irregular wear or damage. If you see abnormal wear, rotate the tyres after determining the cause and correcting any misalignment, balance or contributing mechanical problem. Check wheels for damage. Check tyre inflation pressures. |

**INTERIOR VEHICLE OPERATIONS**

| | |
|---|---|
| | Check operation of all lights (interior and exterior). |
| | Check park brake operation. Adjust if necessary. |
| | Check clutch pedal height. Adjust if necessary. |
| | Lubricate clutch pedal to cable connection. |
| | Seat belt inspection — examine webbing condition, buckle operation, retractor mechanism operation, and anchor security. Report any deficiencies. |

**EXTERIOR VEHICLE OPERATIONS**

| | |
|---|---|
| | Lubricate all locks, exterior door handle pivots, door and rear compartment strikers and hold open devices. Check operation and lubricate hood lock and catch. |

**ROAD TEST**

| | |
|---|---|
| | Check vehicle on road for braking performance, steering operation, engine response, transmission operation.<br>Check park pawl operation (auto) and neutral start switch (auto).<br>Correct and report any abnormal conditions. |

# 45,000 km or 27 Months Service Coupon

GMH QUALITY SERVICE & PARTS

I authorise performance of the services specified on this coupon. I understand that I will be charged for this work which will take approx. 1.9 hrs.

There will also be a charge for all lubricants and filters, parts used as a result of checks and additional services performed as requested.

Additional Services Requested:

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.....

.....

Signature ..... Date .....

Additional Services Performed: .....

**45,000 km or 27 Months SERVICE VALIDATION**

Servicing Dealer .....

Date of Service .....

Odometer .....

Signed .....

**UNDER HOOD OPERATIONS**

| | |
|---|---|
| | Check all fluid levels (where applicable): Brake fluid, coolant, windscreen washer, auto transaxle, power steering. Top up as required with specified fluid. |
| | Check electrolyte and fluid level of battery (where applicable). Check open circuit voltage. |
| | Check engine cooling fan operates within 5 mins. of turning on A/C. |
| | Replace camshaft drive belt. |
| | Check condition, attachment and routing of all hoses and pipes in engine compartment. Includes brake, fuel, engine coolant, power steering, air conditioning and emission control systems. |
| | Pressure test cooling system and surge tank cap. Check for leaks. |
| | Lubricate clutch cable to fork lever pivot. |
| | Lubricate auto transaxle control cable pivots. |
| | Replace spark plugs, check resistance of plug leads. Inspect condition of distributor cap and rotor. |
| | Check ignition timing. |

PTO

## UNDER VEHICLE OPERATIONS

| | |
|---|---|
| | Change engine oil. |
| | Change oil filter. |
| | Manual transaxle. Check oil level. |
| | Manual transaxle. Change oil. |
| | Check all brake and fuel pipes, hoses and connections for condition, leaks and proper attachment. Correct as required. |
| | Check steering gear, joints, steering rack boots and all front and rear suspension components for damaged, loose or missing parts, signs of wear or leakage. |
| | Check driveshaft CV joint boots for proper attachment, condition and grease loss. |
| | Check exhaust system for leakage, security and alignment. Inspect underbody near exhaust system for any condition which could let exhaust fumes into the passenger compartment. Correct as required. |
| | Check front disc brake pads for condition and wear (with road wheels removed). |
| | Remove rear brake drums. Check linings and drums for condition and wear. Check operation of self adjusting mechanism. Inspect wheel cylinders for leakage. |
| | Inspect tyres for irregular wear or damage. If you see abnormal wear, rotate the tyres after determining the cause and correcting any misalignment, balance or contributing mechanical problem. Check wheels for damage. Check tyre inflation pressures. |

## INTERIOR VEHICLE OPERATIONS

| | |
|---|---|
| | Check operation of all lights (interior and exterior). |
| | Check park brake operation. Adjust if necessary. |
| | Check clutch pedal height. Adjust if necessary. |

## EXTERIOR VEHICLE OPERATIONS

| | |
|---|---|
| | Lubricate all locks, exterior door handle pivots, door and rear compartment strikers and hold open devices. Check operation and lubricate hood lock and catch. |

## ROAD TEST

| | |
|---|---|
| | Check vehicle on road for braking performance, steering operation, engine response, transmission operation.<br>Check park pawl operation (auto) and neutral start switch (auto).<br>Correct and report any abnormal conditions. |

## 55,000 km or 33 Months Service Coupon

GMH QUALITY SERVICE & PARTS

I authorise performance of the services specified on this coupon. I understand that I will be charged for this work which will take approx. 1.9 hrs.

There will also be a charge for all lubricants and filters, parts used as a result of checks and additional services performed as requested.

Additional Services Requested:

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Signature ..... Date .....

**55,000 km or 33 Month SERVICE VALIDATION**

Servicing Dealer .....

Date of Service .....

Odometer .....

Signed .....

Additional Services Performed: .....

### UNDER HOOD OPERATIONS

| | |
|---|---|
| | Check all fluid levels (where applicable): Brake fluid, coolant, windscreen washer, auto transaxle, power steering. Top up as required with specified fluid. |
| | Check electrolyte and fluid level of battery (where applicable). Check open circuit voltage. |
| | Check engine cooling fan operates within 5 mins. of turning on A/C. |
| | Check condition and tension of all engine drive belts using gauge. Adjust if necessary. |
| | Check condition, attachment and routing of all hoses and pipes in engine compartment. Includes brake, fuel, engine coolant, power steering, air conditioning and emission control systems. |
| | Drain, flush and refill cooling system with pre-mixed coolant comprising water and recommended inhibitor. Inspect hoses and clamps. Clean outside of radiator and A/C condenser (where fitted). |
| | Pressure test cooling system and surge tank cap. Check for leaks. |
| | Air conditioning — check refrigerant charge at sight glass. |
| | Lubricate throttle linkage. |

PTO

## UNDER VEHICLE OPERATIONS

| | |
|---|---|
| | Change engine oil. |
| | Change oil filter. |
| | Manual transaxle. Check oil level. |
| | Manual transaxle. Change oil. |
| | Check all brake and fuel pipes, hoses and connections for condition, leaks and proper attachment. Correct as required. |
| | Check steering gear, joints, steering rack boots and all front and rear suspension components for damaged, loose or missing parts, signs of wear or leakage. |
| | Check driveshaft CV joint boots for proper attachment, condition and grease loss. |
| | Check exhaust system for leakage, security and alignment. Inspect underbody near exhaust system for any condition which could let exhaust fumes into the passenger compartment. Correct as required. |
| | Check front disc brake pads for condition and wear (with road wheels removed). |
| | Hydraulic brake system — drain and refill with specified fluid from freshly opened container. Bleed system and check brake performance on road test. |
| | Inspect tyres for irregular wear or damage. If you see abnormal wear, rotate the tyres after determining the cause and correcting any misalignment, balance or contributing mechanical problem. Check wheels for damage. Check tyre inflation pressures. |

## INTERIOR VEHICLE OPERATIONS

| | |
|---|---|
| | Check operation of all lights (interior and exterior). |
| | Check park brake operation. Adjust if necessary. |
| | Check clutch pedal height. Adjust if necessary. |
| | Lubricate clutch pedal to cable connection. |
| | Seat belt inspection — examine webbing condition, buckle operation, retractor mechanism operation, and anchor security. Report any deficiencies. |

## EXTERIOR VEHICLE OPERATIONS

| | |
|---|---|
| | Lubricate all locks, exterior door handle pivots, door and rear compartment strikers and hold open devices. Check operation and lubricate hood lock and catch. |

## ROAD TEST

| | |
|---|---|
| | Check vehicle on road for braking performance, steering operation, engine response, transmission operation.<br>Check park pawl operation (auto) and neutral start switch (auto).<br>Correct and report any abnormal conditions. |

# 65,000 km or 39 Months Service Coupon

GMH QUALITY SERVICE & PARTS

I authorise performance of the services specified on this coupon. I understand that I will be charged for this work which will take approx. 1.4 hrs.

There will also be a charge for all lubricants and filters, parts used as a result of checks and additional services performed as requested.

Additional Services Requested:

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Signature ..... Date .....

**UNDER HOOD OPERATIONS**

| | |
|---|---|
| | Check all fluid levels (where applicable): Brake fluid, coolant, windscreen washer, auto transaxle, power steering. Top up as required with specified fluid. |
| | Check electrolyte and fluid level of battery (where applicable). Check open circuit voltage. |
| | Check engine cooling fan operates within 5 mins. of turning on A/C. |
| | Check condition, attachment and routing of all hoses and pipes in engine compartment. Includes brake, fuel, engine coolant, power steering, air conditioning and emission control systems. |
| | Pressure test cooling system and surge tank cap. Check for leaks. |
| | Lubricate clutch cable to fork lever pivot. |
| | Lubricate auto transaxle control cable pivots. |
| | Replace spark plugs, check resistance of plug leads. Inspect condition of distributor cap and rotor. |

PTO

**65,000 km or 39 Months SERVICE VALIDATION**

Servicing Dealer .....

Date of Service .....

Odometer .....

Signed .....

Additional Services Performed: .....

## UNDER VEHICLE OPERATIONS

| | |
|---|---|
| | Change engine oil. |
| | Change oil filter. |
| | Manual transaxle. Check oil level. |
| | Check all brake and fuel pipes, hoses and connections for condition, leaks and proper attachment. Correct as required. |
| | Check steering gear, joints, steering rack boots and all front and rear suspension components for damaged, loose or missing parts, signs of wear or leakage. |
| | Check driveshaft CV joint boots for proper attachment, condition and grease loss. |
| | Check exhaust system for leakage, security and alignment. Inspect underbody near exhaust system for any condition which could let exhaust fumes into the passenger compartment. Correct as required. |
| | Check front disc brake pads for condition and wear (with road wheels removed). |
| | Remove rear brake drums. Check linings and drums for condition and wear. Check operation of self adjusting mechanism. Inspect wheel cylinders for leakage. |
| | Inspect tyres for irregular wear or damage. If you see abnormal wear, rotate the tyres after determining the cause and correcting any misalignment, balance or contributing mechanical problem. Check wheels for damage. Check tyre inflation pressures. |

## INTERIOR VEHICLE OPERATIONS

| | |
|---|---|
| | Check operation of all lights (interior and exterior). |
| | Check park brake operation. Adjust if necessary. |
| | Check clutch pedal height. Adjust if necessary. |

## EXTERIOR VEHICLE OPERATIONS

| | |
|---|---|
| | Lubricate all locks, exterior door handle pivots, door and rear compartment strikers and hold open devices. Check operation and lubricate hood lock and catch. |

## ROAD TEST

| | |
|---|---|
| | Check vehicle on road for braking performance, steering operation, engine response, transmission operation.<br>Check park pawl operation (auto) and neutral start switch (auto).<br>Correct and report any abnormal conditions. |

# 75,000 km or 45 Months Service Coupon

GMH QUALITY SERVICE & PARTS

I authorise performance of the services specified on this coupon. I understand that I will be charged for this work which will take approx. 2.3 hrs.

Add 0.3 hr. for Automatic Transaxle.

There will also be a charge for all lubricants and filters, parts used as a result of checks and additional services performed as requested.

Additional Services Requested:

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Signature ..... Date .....

**UNDER HOOD OPERATIONS**

| | |
|---|---|
| | Check all fluid levels (where applicable): Brake fluid, coolant, windscreen washer, auto transaxle, power steering. Top up as required with specified fluid. |
| | Check electrolyte and fluid level of battery (where applicable). Check open circuit voltage. |
| | Check engine cooling fan operates within 5 mins. of turning on A/C. |
| | Check condition and tension of all engine drive belts using gauge. Adjust if necessary. |
| | Check condition, attachment and routing of all hoses and pipes in engine compartment. Includes brake, fuel, engine coolant, power steering, air conditioning and emission control systems. |
| | Drain, flush and refill cooling system with pre-mixed coolant comprising water and recommended inhibitor. Inspect hoses and clamps. Clean outside of radiator and A/C condenser (where fitted). |
| | Pressure test cooling system and surge tank cap. Check for leaks. |
| | Air conditioning — check refrigerant charge at sight glass. |
| | Lubricate throttle linkage. |
| | Check engine ventilation idle metering orifice for restriction. |
| | Replace engine air cleaner element. |
| | Check evaporative emission canister for air leaks and/or restriction to air flow through the ports. |

PTO

**75,000 km or 45 Months SERVICE VALIDATION**

Servicing Dealer .....

Date of Service .....

Odometer .....

Signed .....

Additional Services Performed:

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## UNDER VEHICLE OPERATIONS

| | |
|---|---|
| | Change engine oil. |
| | Change oil filter. |
| | Replace in-line fuel filter. |
| | Manual transaxle. Check oil level. |
| | Automatic transaxle. Drain fluid, replace filter, refill with specified fluid. |
| | Check all brake and fuel pipes, hoses and connections for condition, leaks and proper attachment. Correct as required. |
| | Check steering gear, joints, steering rack boots and all front and rear suspension components for damaged, loose or missing parts, signs of wear or leakage. |
| | Check driveshaft CV joint boots for proper attachment, condition and grease loss. |
| | Check exhaust system for leakage, security and alignment. Inspect underbody near exhaust system for any condition which could let exhaust fumes into the passenger compartment. Correct as required. |
| | Check front disc brake pads for condition and wear (with road wheels removed). |
| | Inspect, repack and adjust rear wheel bearings. |
| | Hydraulic brake system — drain and refill with specified fluid from freshly opened container. Bleed system and check brake performance on road test. |
| | Inspect tyres for irregular wear or damage. If you see abnormal wear, rotate the tyres after determining the cause and correcting any misalignment, balance or contributing mechanical problem. Check wheels for damage. Check tyre inflation pressures. |

## INTERIOR VEHICLE OPERATIONS

| | |
|---|---|
| | Check operation of all lights (interior and exterior). |
| | Check park brake operation. Adjust if necessary. |
| | Check clutch pedal height. Adjust if necessary. |
| | Lubricate clutch pedal to cable connection. |
| | Seat belt inspection — examine webbing condition, buckle operation, retractor mechanism operation, and anchor security. Report any deficiencies. |

## EXTERIOR VEHICLE OPERATIONS

| | |
|---|---|
| | Lubricate all locks, exterior door handle pivots, door and rear compartment strikers and hold open devices. Check operation and lubricate hood lock and catch. |

## ROAD TEST

| | |
|---|---|
| | Check vehicle on road for braking performance, steering operation, engine response, transmission operation.<br>Check park pawl operation (auto) and neutral start switch (auto).<br>Correct and report any abnormal conditions. |

# 85,000 km or 51 Months Service Coupon

GMH QUALITY SERVICE & PARTS

I authorise performance of the services specified on this coupon. I understand that I will be charged for this work which will take approx. 1.9 hrs.

There will also be a charge for all lubricants and filters, parts used as a result of checks and additional services performed as requested.

Additional Services Requested:

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Signature ..... Date .....

**UNDER HOOD OPERATIONS**

| | |
|---|---|
| | Check all fluid levels (where applicable): Brake fluid, coolant, windscreen washer, auto transaxle, power steering. Top up as required with specified fluid. |
| | Check electrolyte and fluid level of battery (where applicable). Check open circuit voltage. |
| | Check engine cooling fan operates within 5 mins. of turning on A/C. |
| | Replace camshaft drive belt. |
| | Check condition, attachment and routing of all hoses and pipes in engine compartment. Includes brake, fuel, engine coolant, power steering, air conditioning and emission control systems. |
| | Pressure test cooling system and surge tank cap. Check for leaks. |
| | Lubricate clutch cable to fork lever pivot. |
| | Lubricate auto transaxle control cable pivots. |
| | Replace spark plugs, check resistance of plug leads. Inspect condition of distributor cap and rotor. |
| | Check ignition timing. |

PTO

Additional Services Performed: .....

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**85,000 km or 51 Months SERVICE VALIDATION**

Servicing Dealer .....

Date of Service .....

Odometer .....

Signed .....

## UNDER VEHICLE OPERATIONS

| | |
|---|---|
| | Change engine oil. |
| | Change oil filter. |
| | Manual transaxle. Check oil level. |
| | Check all brake and fuel pipes, hoses and connections for condition, leaks and proper attachment. Correct as required. |
| | Check steering gear, joints, steering rack boots and all front and rear suspension components for damaged, loose or missing parts, signs of wear or leakage. |
| | Check driveshaft CV joint boots for proper attachment, condition and grease loss. |
| | Check exhaust system for leakage, security and alignment. Inspect underbody near exhaust system for any condition which could let exhaust fumes into the passenger compartment. Correct as required. |
| | Check front disc brake pads for condition and wear (with road wheels removed). |
| | Remove rear brake drums. Check linings and drums for condition and wear. Check operation of self adjusting mechanism. Inspect wheel cylinders for leakage. |
| | Inspect tyres for irregular wear or damage. If you see abnormal wear, rotate the tyres after determining the cause and correcting any misalignment, balance or contributing mechanical problem. Check wheels for damage. Check tyre inflation pressures. |

## INTERIOR VEHICLE OPERATIONS

| | |
|---|---|
| | Check operation of all lights (interior and exterior). |
| | Check park brake operation. Adjust if necessary. |
| | Check clutch pedal height. Adjust if necessary. |

## EXTERIOR VEHICLE OPERATIONS

| | |
|---|---|
| | Lubricate all locks, exterior door handle pivots, door and rear compartment strikers and hold open devices. Check operation and lubricate hood lock and catch. |

## ROAD TEST

| | |
|---|---|
| | Check vehicle on road for braking performance, steering operation, engine response, transmission operation.<br>Check park pawl operation (auto) and neutral start switch (auto).<br>Correct and report any abnormal conditions. |

# 95,000 km or 57 Months Service Coupon

GMH QUALITY SERVICE & PARTS

I authorise performance of the services specified on this coupon. I understand that I will be charged for this work which will take approx. 1.9 hrs.

There will also be a charge for all lubricants and filters, parts used as a result of checks and additional services performed as requested.

Additional Services Requested:

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Signature ..... Date .....

**UNDER HOOD OPERATIONS**

| | |
|---|---|
| | Check all fluid levels (where applicable): Brake fluid, coolant, windscreen washer, auto transaxle, power steering. Top up as required with specified fluid. |
| | Check electrolyte and fluid level of battery (where applicable). check open circuit voltage. |
| | Check engine cooling fan operates within 5 mins. of turning on A/C. |
| | Check condition and tension of all engine drive belts using gauge. Adjust if necessary. |
| | Check condition, attachment and routing of all hoses and pipes in engine compartment. Includes brake, fuel, engine coolant, power steering, air conditioning and emission control systems. |
| | Drain, flush and refill cooling system with pre-mixed coolant comprising water and recommended inhibitor. Inspect hoses and clamps. Clean outside of radiator and A/C condenser (where fitted). |
| | Pressure test cooling system and surge tank cap. Check for leaks. |
| | Air conditioning — check refrigerant charge at sight glass. |
| | Lubricate throttle linkage. |

PTO

**95,000 km or 57 Months SERVICE VALIDATION**

Servicing Dealer .....

Date of Service .....

Odometer .....

Signed .....

Additional Services Performed:

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## UNDER VEHICLE OPERATIONS

| | |
|---|---|
| | Change engine oil. |
| | Change oil filter. |
| | Manual transaxle. Check oil level. |
| | Manual transaxle. Change oil. |
| | Check all brake and fuel pipes, hoses and connections for condition, leaks and proper attachment. Correct as required. |
| | Check steering gear, joints, steering rack boots and all front and rear suspension components for damaged, loose or missing parts, signs of wear or leakage. |
| | Check driveshaft CV joint boots for proper attachment, condition and grease loss. |
| | Check exhaust system for leakage, security and alignment. Inspect underbody near exhaust system for any condition which could let exhaust fumes into the passenger compartment. Correct as required. |
| | Check front disc brake pads for condition and wear (with road wheels removed). |
| | Hydraulic brake system — drain and refill with specified fluid from freshly opened container. Bleed system and check brake performance on road test. |
| | Inspect tyres for irregular wear or damage. If you see abnormal wear, rotate the tyres after determining the cause and correcting any misalignment, balance or contributing mechanical problem. Check wheels for damage. Check tyre inflation pressures. |

## INTERIOR VEHICLE OPERATIONS

| | |
|---|---|
| | Check operation of all lights (interior and exterior). |
| | Check park brake operation. Adjust if necessary. |
| | Check clutch pedal height. Adjust if necessary. |
| | Lubricate clutch pedal to cable connection. |
| | Seat belt inspection — examine webbing condition, buckle operation, retractor mechanism operation, and anchor security. Report any deficiencies. |

## EXTERIOR VEHICLE OPERATIONS

| | |
|---|---|
| | Lubricate all locks, exterior door handle pivots, door and rear compartment strikers and hold open devices. Check operation and lubricate hood lock and catch. |

## ROAD TEST

| | |
|---|---|
| | Check vehicle on road for braking performance, steering operation, engine response, transmission operation.<br>Check park pawl operation (auto) and neutral start switch (auto).<br>Correct and report any abnormal conditions. |

# 105,000 km or 63 Months Service Coupon

I authorise performance of the services specified on this coupon. I understand that I will be charged for this work which will take approx. 1.4 hrs.

There will also be a charge for all lubricants and filters, parts used as a result of checks and additional services performed as requested.

Additional Services Requested:

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Signature ..... Date .....

**UNDER HOOD OPERATIONS**

| | |
|---|---|
| | Check all fluid levels (where applicable): Brake fluid, coolant, windscreen washer, auto transaxle, power steering. Top up as required with specified fluid. |
| | Check electrolyte and fluid level of battery (where applicable). Check open circuit voltage. |
| | Check engine cooling fan operates within 5 mins. of turning on A/C. |
| | Check condition, attachment and routing of all hoses and pipes in engine compartment. Includes brake, fuel, engine coolant, power steering, air conditioning and emission control systems. |
| | Pressure test cooling system and surge tank cap. Check for leaks. |
| | Lubricate clutch cable to fork lever pivot. |
| | Lubricate auto transaxle control cable pivots. |
| | Replace spark plugs, check resistance of plug leads. Inspect condition of distributor cap and rotor. |

PTO

**105,000 km or 63 Months SERVICE VALIDATION**

Servicing Dealer .....

Date of Service .....

Odometer .....

Signed .....

Additional Services Performed:

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**UNDER VEHICLE OPERATIONS**

| | |
|---|---|
| | Change engine oil. |
| | Change oil filter. |
| | Manual transaxle. Check oil level. |
| | Check all brake and fuel pipes, hoses and connections for condition, leaks and proper attachment. Correct as required. |
| | Check steering gear, joints, steering rack boots and all front and rear suspension components for damaged, loose or missing parts, signs of wear or leakage. |
| | Check driveshaft CV joint boots for proper attachment, condition and grease loss. |
| | Check exhaust system for leakage, security and alignment. Inspect underbody near exhaust system for any condition which could let exhaust fumes into the passenger compartment. Correct as required. |
| | Check front disc brake pads for condition and wear (with road wheels removed). |
| | Remove rear brake drums. Check linings and drums for condition and wear. Check operation of self adjusting mechanism. Inspect wheel cylinders for leakage. |
| | Inspect tyres for irregular wear or damage. If you see abnormal wear, rotate the tyres after determining the cause and correcting any misalignment, balance or contributing mechanical problem. Check wheels for damage. Check tyre inflation pressures. |

**INTERIOR VEHICLE OPERATIONS**

| | |
|---|---|
| | Check operation of all lights (interior and exterior). |
| | Check park brake operation. Adjust if necessary. |
| | Check clutch pedal height. Adjust if necessary. |

**EXTERIOR VEHICLE OPERATIONS**

| | |
|---|---|
| | Lubricate all locks, exterior door handle pivots, door and rear compartment strikers and hold open devices. Check operation and lubricate hood lock and catch. |

**ROAD TEST**

| | |
|---|---|
| | Check vehicle on road for braking performance, steering operation, engine response, transmission operation.<br>Check park pawl operation (auto) and neutral start switch (auto).<br>Correct and report any abnormal conditions. |

# 115,000 km or 69 Months Service Coupon

I authorise performance of the services specified on this coupon. I understand that I will be charged for this work which will take approx. 2.3 hrs.

Add 0.3 hr. for Automatic Transaxle.

There will also be a charge for all lubricants and filters, parts used as a result of checks and additional services performed as requested.

Additional Services Requested:

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Signature ..... Date .....

Additional Services Performed: .....

**115,000 km or 69 Months SERVICE VALIDATION**

Servicing Dealer .....

Date of Service .....

Odometer .....

Signed .....

**UNDER HOOD OPERATIONS**

| | |
|---|---|
| | Check all fluid levels (where applicable): Brake fluid, coolant, windscreen washer, auto transaxle, power steering. Top up as required with specified fluid. |
| | Check electrolyte and fluid level of battery (where applicable). Check open circuit voltage. |
| | Check engine cooling fan operates within 5 mins. of turning on A/C. |
| | Check condition and tension of all engine drive belts using gauge. Adjust if necessary. |
| | Check condition, attachment and routing of all hoses and pipes in engine compartment. Includes brake, fuel, engine coolant, power steering, air conditioning and emission control systems. |
| | Drain, flush and refill cooling system with pre-mixed coolant comprising water and recommended inhibitor. Inspect hoses and clamps. Clean outside of radiator and A/C condensor (where fitted). |
| | Pressure test cooling system and surge tank cap. Check for leaks. |
| | Air conditioning — check refrigerant charge at sight glass. |
| | Lubricate throttle linkage. |
| | Check engine ventilation idle metering orifice for restriction. |
| | Replace engine air cleaner element. |
| | Check evaporative emission canister for air leaks and/or restriction to air flow through the ports. |

PTO

## UNDER VEHICLE OPERATIONS

| | |
|---|---|
| | Change engine oil. |
| | Change oil filter. |
| | Replace in-line fuel filter. |
| | Manual transaxle. Check oil level. |
| | Automatic transaxle. Drain fluid, replace filter, refill with specified fluid. |
| | Check all brake and fuel pipes, hoses and connections for condition, leaks and proper attachment. Correct as required. |
| | Check steering gear, joints, steering rack boots and all front and rear suspension components for damaged, loose or missing parts, signs of wear or leakage. |
| | Check driveshaft CV joint boots for proper attachment, condition and grease loss. |
| | Check exhaust system for leakage, security and alignment. Inspect underbody near exhaust system for any condition which could let exhaust fumes into the passenger compartment. Correct as required. |
| | Check front disc brake pads for condition and wear (with road wheels removed). |
| | Inspect, repack and adjust rear wheel bearings. |
| | Hydraulic brake system — drain and refill with specified fluid from freshly opened container. Bleed system and check brake performance on road test. |
| | Inspect tyres for irregular wear or damage. If you see abnormal wear, rotate the tyres after determining the cause and correcting any misalignment, balance or contributing mechanical problem. Check wheels for damage. Check tyre inflation pressures. |

## INTERIOR VEHICLE OPERATIONS

| | |
|---|---|
| | Check operation of all lights (interior and exterior). |
| | Check park brake operation. Adjust if necessary. |
| | Check clutch pedal height. Adjust if necessary. |
| | Lubricate clutch pedal to cable connection. |
| | Seat belt inspection — examine webbing condition, buckle operation, retractor mechanism operation, and anchor security. Report any deficiencies. |

## EXTERIOR VEHICLE OPERATIONS

| | |
|---|---|
| | Lubricate all locks, exterior door handle pivots, door and rear compartment strikers and hold open devices. Check operation and lubricate hood lock and catch. |

## ROAD TEST

| | |
|---|---|
| | Check vehicle on road for braking performance, steering operation, engine response, transmission operation.<br>Check park pawl operation (auto) and neutral start switch (auto).<br>Correct and report any abnormal conditions. |

# 125,000 km or 75 Months Service Coupon

GMH QUALITY SERVICE & PARTS

I authorise performance of the services specified on this coupon. I understand that I will be charged for this work which will take approx. 1.9 hrs.

There will also be a charge for all lubricants and filters, parts used as a result of checks and additional services performed as requested.

Additional Services Requested:

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.....

.....

Signature ..... Date .....

**UNDER HOOD OPERATIONS**

| | |
|---|---|
| | Check all fluid levels (where applicable): Brake fluid, coolant, windscreen washer, auto transaxle, power steering. Top up as required with specified fluid. |
| | Check electrolyte and fluid level of battery (where applicable). Check open circuit voltage. |
| | Check engine cooling fan operates within 5 mins. of turning on A/C. |
| | Replace camshaft drive belt. |
| | Check condition, attachment and routing of all hoses and pipes in engine compartment. Includes brake, fuel, engine coolant, power steering, air conditioning and emission control systems. |
| | Pressure test cooling system and surge tank cap. Check for leaks. |
| | Lubricate clutch cable to fork lever pivot. |
| | Lubricate auto transaxle control cable pivots. |
| | Replace spark plugs, check resistance of plug leads. Inspect condition of distributor cap and rotor. |
| | Check ignition timing. |

PTO

**125,000 km or 75 Months SERVICE VALIDATION**

Servicing Dealer .....

Date of Service .....

Odometer .....

Signed .....

Additional Services Performed:

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## UNDER VEHICLE OPERATIONS

| | |
|---|---|
| | Change engine oil. |
| | Change oil filter. |
| | Manual transaxle. Check oil level. |
| | Check all brake and fuel pipes, hoses and connections for condition, leaks and proper attachment. Correct as required. |
| | Check steering gear, joints, steering rack boots and all front and rear suspension components for damaged, loose or missing parts, signs of wear or leakage. |
| | Check driveshaft CV joint boots for proper attachment, condition and grease loss. |
| | Check exhaust system for leakage, security and alignment. Inspect underbody near exhaust system for any condition which could let exhaust fumes into the passenger compartment. Correct as required. |
| | Check front disc brake pads for condition and wear (with road wheels removed). |
| | Remove rear brake drums. Check linings and drums for condition and wear. Check operation of self adjusting mechanism. Inspect wheel cylinders for leakage. |
| | Inspect tyres for irregular wear or damage. If you see abnormal wear, rotate the tyres after determining the cause and correcting any misalignment, balance or contributing mechanical problem. Check wheels for damage. Check tyre inflation pressures. |

## INTERIOR VEHICLE OPERATIONS

| | |
|---|---|
| | Check operation of all lights (interior and exterior). |
| | Check park brake operation. Adjust if necessary. |
| | Check clutch pedal height. Adjust if necessary. |

## EXTERIOR VEHICLE OPERATIONS

| | |
|---|---|
| | Lubricate all locks, exterior door handle pivots, door and rear compartment strikers and hold open devices. Check operation and lubricate hood lock and catch. |

## ROAD TEST

| | |
|---|---|
| | Check vehicle on road for braking performance, steering operation, engine response, transmission operation.<br>Check park pawl operation (auto) and neutral start switch (auto).<br>Correct and report any abnormal conditions. |

## Notice of Name/Address Ownership Change

NAME/ADDRESS CHANGE ☐ SUBSEQUENT OWNER ☐
PLEASE TICK ☑ APPROPRIATE SQUARE

Owner's Name Mr. Mrs. Miss .....

Address .....

Town .....

State ..... Post Code .....

Registration No. .....

Vehicle Identification Number (V.I.N.) .....

(Refer Chapter 9 for location of V.I.N.)


## Notice of Name/Address Ownership Change

NAME/ADDRESS CHANGE ☐ SUBSEQUENT OWNER ☐
PLEASE TICK ☑ APPROPRIATE SQUARE

Owner's Name Mr. Mrs. Miss .....

Address .....

Town .....

State ..... Post Code .....

Registration No. .....

Vehicle Identification Number (V.I.N.) .....

(Refer Chapter 9 for location of V.I.N.)

*Place in an envelope and mail to:*

The Manager — Warranty Administration,
Service Department,
Holden's Motor Company,
Box 548D, G.P.O.,
Melbourne,
Victoria, 3001

*Place in an envelope and mail to:*

The Manager — Warranty Administration,
Service Department,
Holden's Motor Company,
Box 548D, G.P.O.,
Melbourne,
Victoria, 3001

## Notice of Name/Address Ownership Change

NAME/ADDRESS CHANGE ☐ SUBSEQUENT OWNER ☐
PLEASE TICK ☑ APPROPRIATE SQUARE

Owner's Name Mr. Mrs. Miss .....

Address .....

Town .....

State ..... Post Code .....

Registration No. .....

Vehicle Identification Number (V.I.N.) .....

(Refer Chapter 9 for location of V.I.N.)


## Notice of Name/Address Ownership Change

NAME/ADDRESS CHANGE ☐ SUBSEQUENT OWNER ☐
PLEASE TICK ☑ APPROPRIATE SQUARE

Owner's Name Mr. Mrs. Miss .....

Address .....

Town .....

State ..... Post Code .....

Registration No. .....

Vehicle Identification Number (V.I.N.) .....

(Refer Chapter 9 for location of V.I.N.)

*Place in an envelope and mail to:*

The Manager — Warranty Administration,
Service Department,
Holden's Motor Company,
Box 548D, G.P.O.,
Melbourne,
Victoria, 3001

*Place in an envelope and mail to:*

The Manager — Warranty Administration,
Service Department,
Holden's Motor Company,
Box 548D, G.P.O.,
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Victoria, 3001

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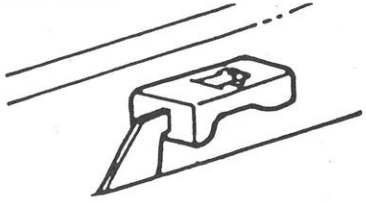
# FUEL

**CAUTION: Petrol is extremely flammable and highly explosive under certain conditions. Always stop the engine and do not smoke or allow open flames or sparks near the vehicle when refuelling. If petrol fumes are noticed while driving, the cause should be determined and corrected without delay.**

The fuel filler door is opened by pulling up the lever, located on the right side of the driver's seat, near the floor. The fuel cap may then be removed by turning anti-clockwise.



EXPORT vehicles are designed to operate on a good quality leaded fuel of 97 Octane Rating.

Vehicles operated in AUSTRALIA must use a good clean UNLEADED FUEL of at least 91 octane rating (Research Octane Number), as indicated by the label on the fuel cap. The use of any other fuel will seriously damage the fuel system of your car (particularly the catalytic converter) and may void your Warranty.

A fuel filler nozzle restrictor is fitted to Australian vehicles to ensure that UNLEADED fuel is used. This allows the thinner, unleaded fuel filler nozzle to open the hinged flap, so that fuel may be added to the fuel tank. The leaded, fuel filler nozzle is wider and therefore cannot open the flap.

Overfilling of the fuel tank can affect the evaporative Emission Control System.

To avoid this, the following recommendations are made:

1. Fuel tanks should always be filled at the intermediate or fast fill rate. After initial shut-off (or vent blow back) no further fuel should be added. This retains the tank's ability to accommodate fuel expansion.
2. It is permissible to "trickle fill" fuel tanks where vehicles are to be driven for a distance of at least 50 km shortly after the tank is filled.

Note that the use of unleaded fuel results in black tail pipe deposits rather than the grey colour with which most people are familiar. The black colour does not, therefore, indicate a state of poor engine tune.

TANK CAPACITIES = 60 litres approximately.

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